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A LIST
OF
PLANTS GROWING WITHOUT CULTIVATION
IN
Franklin, Hampshire and Hampden Counties
MASSACHUSETTS

By GEORGE E. STONE,
Professor of Botany at the Massachusetts Agricultural College

AMHERST, MASS.
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Additions and Corrections.

The following plants are introduced instead of native, as indicated in the text:

Amaranthus HYBRIDUS L. and forma HYPOCHONDRIACUS L., p. 26.
Melilotus OFFICINALIS (L.) Lam., p. 38.

Insert p. 29, after **R. abortivus** L.:

Ranculatus abortivus L. var. **eucyclus** Fernald. Springfield,
L. Andrews.

Insert p. 31, after **Alyssum**:

Thlaspi ARVENSE L. Springfield, L. Andrews.

Insert p. 32, after **S. officinale** (L.) Scop. var. **leiocarpum** DC.:

Sisymbrium ALTISSIMUM L. Springfield, L. Andrews.

The first effort toward a systematic study of the native plants of this region was made by Pres. Edward Hitchcock¹ about 1817. The results of his explorations were published in 1829, and for many years very little was added to this list except what Prof. Tuckerman and others published in contemporary scientific journals. In 1875 Prof. Edward Tuckerman,² who for many years occupied the chair of history and botany in Amherst College, published his "Flora-Amherstiensis," in co-operation with Mr. Charles C. Frost, of Brattleboro, Vermont. This list is based on Pres. Hitchcock's previous catalogue, but is much more extensive, including as it does an elaborate list of mosses, liverworts, lichens and fungi, and in all it contains nearly 3,000 species and varieties. It is unusually complete for its day, and represents the work of skilled observers and systematists.

Besides being largely responsible for the flowering plants and vascular cryptogams contained in the Flora, Prof. Tuckerman contributed a very elaborate list of lichens, a most perplexing group of plants. He will always be remembered as the American pioneer in the study of lichens, and was from the first a thorough master of this difficult group, while he lived having no competitors. Even today his work remains unsurpassed and ranks as a classic.

The comprehensive list of mosses, liverworts, fungi, etc., was contributed by Mr. Charles C. Frost, and quite a few of the fungi bear his name as authority. This self-educated man, whose trade was that of cobbler, spent his leisure moments in the study of these difficult groups.

In 1887 Dr. N. A. Cobb,³ then a teacher of science at Williston Seminary, but later government pathologist in New South Wales and now with the Bureau of Plant Industry, Washington, D. C., published a revised edition of Prof. Tuckerman's catalogue, in which new plants were added and the boundaries of others not so well known extended. Since Dr. Cobb's catalogue in 1887 a few additions to the plants of the region have been published, appearing largely in *Rhodora*.

Professional collectors and students from the various educational institutions located in the Connecticut valley have for years been active in collecting herbaria, and some new and rare plants have been

¹ E. Hitchcock—Catalogue of Plants growing without Cultivation in the Vicinity of Amherst College.

² E. Tuckerman—Catalogue of Plants growing without Cultivation within Thirty Miles of Amherst College.

³ N. A. Cobb.—A List of Plants Found Growing Wild within Thirty Miles of Amherst.

brought to light. But since 1875 the study of botany has undergone many changes, and its present day problems differ greatly from those of former times. The systematist's conception of a species has also changed, a finer discrimination in determining species being required at the present time. The nomenclature question, the constant splitting up of species and the revision of families and genera are rendering the subject more perplexing and less fascinating to at least the true nature loving botanist.

In the present instance it has been our intention to bring the flora up to date and modify its scope to include the three counties comprising the Connecticut valley. These counties, whose boundaries are fairly uniform, represent a section extending from Connecticut to the New Hampshire and Vermont lines. The Connecticut valley forms a distinct area differing quite widely in its soil and climatic conditions from other sections of the state, the elevation ranging from less than 100 feet to only a few hundred feet. Here the elm reaches its greatest perfection, and on the higher slopes the rock maple finds its most congenial environment. The eastern part of the territory resembles that of Worcester county, and the general elevation ranges from 400 to about 1,200 feet; while the western section, which has an elevation of 800 to 2,200 or more feet, and which is farther from the coast, resembles in many ways southern Vermont. On the higher elevations of our western range the golden hawkweed becomes a pest in fields, as in Vermont, although in the Connecticut valley this plant is not common enough to be a nuisance. Here, too, the soil conditions are more primitive, therefore humus plants are found more abundantly than elsewhere in the state. In this region grow forests of beech and red spruce, and the balsam fir and hackmatack are common.

The diversified forms of plants which characterize a region and which we term its flora, represent adaptations to a more or less congenial environment, and even during the relatively brief period of the settlement of New England many of our introduced plants undoubtedly became modified to a certain extent. Even species which are adapted to a much warmer climate than our own frequently prove themselves as hardy as our native species, whereas on the other hand, quite a few of our native trees, like the sycamore and others, are often affected by winter killing.

There are many factors which play an important part in the distribution of plants of which we know little, and the problems involved are difficult of solution. Variations in the humus content, in the soil moisture or light intensity, may completely exterminate a species in a given locality. Continued deforestation has greatly modified our flora, many species having become rarer. Humus has played a very important role not only in affecting the predominance of certain

species but in modifying their growth. Many such species as hemlock, canoe birch, beech, hobblebush, round-leaved cornel (*Cornus circinata* L'Her) and others find less congenial conditions than formerly. The hemlock has declined from a tree second in importance in the primitive forests to one of slight importance at the present time. Such plants as *Hydrophyllum virginianum* and *canadense*, certain orchids and many others were no doubt always more or less rare or local, but at present they are very rare. In colonial times the wild strawberry was quite abundant in Massachusetts, and even less than a century ago it was fairly plentiful, but at present it is of no economic value except in our western territory. Some of the plants observed by Dr. Hitchcock nearly a century ago and included in this list have not been found since his time, and others have become rare. On the other hand, deforestation and the consequent cultivation of much of our soil has modified the environment to such an extent that the willow, birch, goldenrod, aster, violet, bluet, *Lespedeza* and a host of others are found more abundantly than formerly, and as Prof. Ezra Brainerd has pointed out, there is a marked tendency for violets to hybridize when growing in the open.

Many of our introduced plants were brought from Europe in early times. Some of them have been growing without much change for many years, while others have so adapted themselves to our conditions that they have become troublesome weeds. In the past twenty-five years many such plants have been introduced through grass seed and by means of commercial relations with other countries. Many of the plants which Prof. Tuckerman observed as rare in 1875 are now common enough, such, for example, as *Stellaria graminea* L., *Digitalis humifusa* Pers., *Leontodon autumnalis* L. and *Cerastium vulgatum* L., etc. On the other hand, some of our introduced plants have not shown any tendency to spread, and in some cases they have apparently not held their own. Among such plants might be mentioned *Tussilago Farfara* L., *Sedum*, buckthorn (*Rhamnus cathartica* L.), various dooryard weeds and plants used for medicinal purposes in former times, such as lovage (*Levisticum officinale* Koch.), wormwood (*Artemisia absinthium* L.), catnip (*Nepeta Cataria* L.), horseradish (*Radicula Armoracia* L.), henbane (*Hyoscyamus niger* L.), horehound (*Marrubium vulgare* L.), and Canada thistle, which forty years ago was considered a more or less serious pest, but is not now troublesome. These plants were in former times considered essential by most well regulated families, but now, along with the lilac, Lombardy poplar, live-forever and the old garden rose, they may be found persisting under unfavorable conditions, serving merely as landmarks of once thriving homesteads.

Some of the more important introduced species not noted by Prof. Tuckerman, which are more or less common now, are *Trifolium hybridum* L., golden hawkweed, *Bromus tectorum* L., Russian thistle (*Salsola*), *Galinsoga*, *Berteroa incana* (L.) DC., *Thymus Serpyllum* L., *Cynodon Dactylon* (L.) Pers., *Lysimachia Nummularia* L., *Lychnis Flos-cuculi* L. and *Lychnis alba* Mill.

Impure seed is the most important factor in the introduction of harmless and noxious species, and from 75 to 100 or more different species may occur in a particular sample or lot of grass seed. The impurities run from 5 to 25 per cent or more, and although frequently harmless, 10 or 15 per cent of noxious weeds are sometimes present in grass or clover seed. Since seed are sent from all over the United States and imported from foreign countries, it follows that a great variety of plants may be introduced into a particular region. Black medick, Canada thistle, charlock, chicory, crabgrass, chickweed, dodder, various docks and plantains, green foxtail, goosefoot, lady's thumb, ragweed, sheep sorrel, wild carrot, witch grass, yellow foxtail and many others constitute the principal impurities in seed. Dame and Collins,¹ in their "Flora of Middlesex county," enumerate 460 naturalized and adventive species and varieties which have become more or less established in that region.

In the preparation of this list I am under obligations to different ones whose names will be found throughout the text. This is especially true of Mr. Ray E. Torrey, of the 1912 class of this College, who has rendered valuable assistance all through the work. Mr. Torrey has also been of great service, from his extensive collecting and critical knowledge of our flora, in furnishing data in regard to the present range of certain species.

I am also indebted to Prof. A. Vincent Osmun, my colleague, who has given much attention to our native ferns and violets, and to Miss Jessie V. Crocker for assistance in seeing the work through the press. Dr. W. H. Chapin, of Springfield, has kindly furnished notes in regard to the plants in that locality, and Mrs. Maria L. Owen's long experience in collecting and studying the native plants has been helpful. Mr. Luman Andrews, of Southington, Connecticut, who is at present making an exhaustive study of the plants about Springfield, has furnished a large amount of data concerning new finds, as well as extending our knowledge of the range of other species. Mr. Andrews' herbarium has been presented to the Springfield Science Museum, where it is well arranged, and it is anticipated that he will add greatly to it in the future. We have also had access to the herbarium of the Springfield Science Museum, which besides the already referred to Luman Andrews collection, contains that of the Springfield Botanical

¹ L. Dame and F. S. Collins, "Flora of Middlesex County, Massachusetts, 1888.

Society; and, in addition, we have consulted the herbaria of Mt. Holyoke and Amherst Colleges, and the Knowlton herbarium of the Massachusetts Agricultural College. The mosses, liverworts, lichens, fungi and Characeae have been purposely omitted from this list. The list of lichens in Prof. Tuckerman's catalogue is one of the most complete and authentic published, but the list of fungi, Characeae, etc., contributed by Mr. Frost is of little value as it stands today, since much progress has been made in the study of these groups since his time.

This list would possess much less value were it not for the work of my predecessors, and frequent reference has been made to Pres. Edward Hitchcock¹, Prof. Edward Tuckerman², Prof. H. G. Jesup³, Col. W. S. Clark⁴, Dr. N. A. Cobb and others, who have contributed to the previous lists of this region.

I have endeavored to differentiate between indigenous (native), naturalized, and adventive species (introduced but not permanently established), by putting the naturalized species in capitals and the adventive in italics, although there may be some errors in judgment as to which are adventive and which naturalized in our range.

The nomenclature and arrangement of families, etc., follows Gray's Manual, seventh edition, although we have in some instances referred to Britton & Brown's North American Flora, and Prof. L. H. Bailey's Cyclopedia of American Horticulture.

This list contains in all 1190 native and 303 naturalized and adventive species, a total of 1493.

GEORGE EDWARD STONE.

Amherst, Mass., Feb. 15, 1913.

¹ Edward Hitchcock, A. M., D. D., LL. D., 1793—1864. Professor Chemistry and Natural History Amherst College, 1825—1845. President, 1845—1854. State Geologist, 1830—1864. Emeritus Professor Geology Amherst College, until 1864. Pioneer in American geological research.

² Edward Tuckerman, B. A., M. A., LL. B., LL. D., 1817—1886. Lecturer and Professor Oriental History Amherst College, 1854—1873. Professor Botany, 1858—1886. Pioneer in American lichenology.

³ Henry Griswold Jesup, M. A., 1826—1903. Professor Botany Dartmouth College, 1877—1899.

⁴ William Smith Clark, M. A., Ph. D., LL. D., 1826—1886. Professor Chemistry, Botany and Zoology Amherst College. 1852—1867. Colonel Civil War, 1862. President and Professor Botany and Horticulture, Mass. Agr. College, 1867—1879.

PTERIDOPHYTA

(Ferns and Fern Allies)

POLYPODIACEAE

- Polypodium* [Tourn.] L. Polypody.
 vulgare L. Common Polypody.
Phegopteris [Presl.] Fée. Beech Fern.
 polypodioides Fée.
 hexagonoptera (Michx.) Fée.
 Dryopteris (L.) Fée. Oak Fern.
Adiantum [Tourn.] L. Maidenhair Fern.
 pedatum L.
Pteris L. Brake or Bracken.
 aquilina L. Common Brake.
Pellaea Link. Cliff Brake.
 atropurpurea (L.) Link. Mt. Toby; Gorge and near Titan's piazza, Mt. Holyoke, Mrs. C. S. Phelps; Wilbraham, Dr. W. H. Chapin; Mt. Tom; Mt. Sugar Loaf.
Cryptogramma R. Br. Rock Brake.
 Stelleri (Gmel.) Prantl. Mt. Toby.
Woodwardia Sm. Chain Fern.
 virginica (L.) Sm. Springfield, Dr. W. H. Chapin; Belchertown, South Hadley.
 areolata (L.) Moore. Hadley, H. G. Jesup; Deerfield, E. Hitchcock.
Asplenium L. Spleenwort.
 Trichomanes L.
 platyneuron L. Oakes.
 Ruta-muraria L. Wall Rue. Mt. Toby.
 angustifolium Michx. Mt. Toby, Mt. Tom and vicinity.
 acrostichoides Sw. Amherst, South Hadley, etc.
 Filix-femina (L.) Bernh. Lady Fern.
Camptosorus Link. Walking Leaf.
 rhizophyllus (L.) Link. Mt. Toby, etc., Mt. Holyoke[Gorge] Mrs. C. S. Phelps; Wilbraham, Dr. W. H. Chapin.
Polystichum Roth.
 acrostichoides (Michx.) Schott. Christmas Fern.
 acrostichoides (Michx.) Schott. var. *schweinitzii* (Beck.) Small.
 Not rare.
Aspidium Sw. Shield Fern. Wood Fern.

A. Thelypteris (L.) Sw.*simulatum* Davenp. Mt. Toby, A. V. Osmun.*noveboracense* (L.) Sw.*marginale* (L.) Sw.**Goldianum** Hook. Mt. Tom, S. Stebbins; Mt. Toby; Notch, Mt. Holyoke, A. V. Osmun.**Boottii** Tuckerm. Mt. Toby.*cristatum* (L.) Sw.*cristatum* L. Sw. var. *clintonianum* D. C. Eaton. Mt. Toby, etc.*spinulosum* (O. F. Müller) Sw. Mt. Toby, etc.*spinulosum* (O. F. Müller) Sw. var. *intermedium* (Muhl.) D. C. Eaton. Mt. Toby, etc.*spinulosum* (O. F. Müller) Sw. var. *dilitatum* (Hoffm.) Hook. Mt. Toby, A. V. Osmun.**Cystopteris** Bernhardt. Bladder Fern.*bulbifera* (L.) Bernh. Mt. Toby, Sunderland, etc.*fragilis* (L.) Bernh. Springfield, S. Stebbins; Mt. Holyoke; Sunderland, etc.**Woodsia** R. Brown.*ilvensis* (L.) R. Brown.*obtusa* (Spreng.) Torr.**Dicksonia** L'Hér.*punctilobula* (Michx.) Gray. Hay-scented Fern.**Onoclea** L.*sensibilis* L. Sensitive Fern.**Struthiopteris** (L.) Hoffman. Ostrich fern. This fern in Mass. attains its maximum development in the Conn. valley reaching a height of 7 feet or more.

SCHIZAEACEAE

Lygodium Swartz. Climbing Fern.*palmatum* (Bernh.) Sw. Local.

OSMUNDACEAE

Osmunda [Tourn.] L. Flowering Fern.*regalis* L.*Claytoniana* L.*cinnamomea* L. Cinnamon Fern.

OPHIOGLOSSACEAE

Ophioglossum [Tourn.] L. Adder's Tongue.*vulgatum* L.**Botrychium** Swartz. Moonwort.*simplex* E. Hitchcock. Conway, E. Hitchcock: Plainfield, etc., Porter; Mt. Toby.

- B. lanceolatum* (Gmel.) Angstroem. var. *angustisegmentum* Pease & Moore. Amherst, L. B. Tuckerman; Conway, H. G. Jesup; Mt. Toby, Sumner C. Brooks; Holyoke Range, A. V. Osmun.
- ramosum* (Roth.) Ashers Conway, etc., H. G. Jesup; Mt. Toby, T. O. Fuller in *Rhodora*, Vol. III., p. 144: Springfield, Dr. W. H. Chapin.
- obliquum* Muhl.
- obliquum* Muhl. var. *dissectum* Spreng.
- ternatum* (Thunb.) Swartz. var. *intermedium* D. C. Eaton.
- virginianum* (L.) Swartz. Rattlesnake Fern.

EQUISETACEAE

- Equisetum* [Tourn.] L. Horsetail.
- arvense* L. Common Horsetail.
- arvense* forma *decumbens*, Springfield.
- sylvaticum* L.
- fluviatile* L. Pipes.
- hyemale* L. Scouring Rush.
- hyemale* L. var. *affine* (Engelm.) A. A. Eaton. Springfield, L. Andrews.
- variegatum* Schleich. var. *Jesupi* A. A. Eaton. Conway, H. G. Jesup.
- scirpoides* Michx. Plainfield, Porter; Colrain, E. F. Williams in *Rhodora*, Vol. XII., p. 170.

LYCOPODIACEAE

- Lycopodium* L. Club moss.
- Selago* L. Mt Holyoke, Freeman in *Rhodora* Vol. V., p. 290.
- lucidulum* Michx.
- inundatum* L. Amherst, etc.
- annotinum* L.
- clavatum* L. Common Club Moss.
- clavatum* L. var. *monostachyon* Grev. & Hook.
- obscurum* L.
- obscurum* L. var. *dendroideum* (Michx.) D. C. Eaton.
- sabinaefolium* Willd. Tuckerman.
- complanatum* L.
- complanatum* L. var. *flabelliforme* Fernald. Ground Pine.
- tristachyum* Pursh.

SELAGINELLACEAE

- Selaginella* Beauv.
- rupestris* (L.) Spring.
- apus* (L.) Spring.

ISOETACEAE

Isoetes L. Quillwort.

echinospora Durieu. var. *Braunii* (Dur.) Engelm.

Eatoni Dodge.

Gravesii A. A. Eaton.

Engelmanni A. Br. Other forms of *Isoetes* exist in this region
but they have not been sufficiently studied.

SPERMATOPHYTA

(Seed Plants.)

GYMNOSPERMAE

TAXACEAE

Taxus [Tourn.] L. Yew.

canadensis Marsh. American Yew, Ground Hemlock.

PINACEAE

Pinus [Tourn.] L. Pine.

Strobus L. White Pine.

rigida Mill. Pitch Pine.

SYLVESTRIS L. Scotch Pine. Escaped from cultivation and established abundantly in some localities.

resinosa Ait. Red Pine. Locally distributed.

Larix [Tourn.] Adans. Larch. American Larch, Tamarack, Hackmatack.

laricina (DuRoi) Koch.

decidua Mill. Amherst, escaped from cultivation.

Picea Link. Spruce.

rubra (DuRoi) Dietr. Red Spruce. Occasionally found on high elevations. Much less abundant in our region than Worcester and Berkshire counties.

mariana (Mill.) BPS. Black or Bog Spruce. Found in cold bogs and swamps.

abies (L.) Karst. Norway Spruce. Occasionally escaped from cultivation.

Abies [Tourn.] Hill. Fir.

balsamea (L.) Miller. Balsam or Balm-of-Gilead Fir. Generally distributed but not common.

Tsuga (Endl.) Carrière. Hemlock.

canadensis (L.) Carr.

Chamaecyparis Spach. White Cedar, Cypress.

thyoides (L.) BSP. Springfield.

Juniperus [Tourn.] L. Juniper.

communis L. Common Juniper.

communis L. var. *depressa* Pursh. Three distinct types of *Juniperus communis* are found in this region; a low form var. *depressa*; a more or less erect form considered as the type; and a tree-like form corresponding to *J. communis* var. *erecta* Pursh. See Mrs. E. H. Terry, *Rhodora*, Vol. III., p. 146.

virginiana L. Red Cedar or Savin. Variable in form and color.

ANGIOSPERMAE

MONOCOTYLEDONEAE

TYPHACEAE

- Typha* [Tourn.] L. Cat-tail Flag.
latifolia L. Common Cat-tail.
angustifolia L. Belchertown near B. & M. R. R. station, S. C.
 Brooks.

SPARGANIACEAE

- Sparganium* [Tourn.] L. Bur-reed.
eurycarpum Engelm.
americanum Nutt. Bay street, Springfield, L. Andrews.
simplex Huds.

NAJADACEAE

- Potamogeton* [Tourn.] L. Pondweed.
natans L.
Oakesianus Robbins.
epiphydrus Raf.
alpinus Balbis.
americanus C. & S. Conn. river, etc.
pulcher Tuckerm. South pond, Belchertown, E. Tuckerman.
amplifolius Tuckerm.
heterophyllus Schreb.
heterophyllus forma *graminifolius* (Fries) Morong.
lucens L. Leverett pond. E. Tuckerman.
praelongus Wulf.
perfoliatus L.
zosterifolius Schumacher.
obtusifolius Mertens and Koch. Forge pond, Granby, E. Tucker-
 man.
pusillus L.
foliosus Raf.
hybridus Michx.
dimorphus Raf.
pectinatus L. Conn. river, E. Tuckerman.
Robinsii Oakes.
Najas L. Naiad.
flexilis (Willd.) Rostk. & Schmidt.

JUNCAGINACEAE

Scheuchzeria L.

palustris L. Belchertown ponds, Bradley pond, Springfield, S. Stebbins.

ALISMACEAE

Sagittaria L. Arrow-head.

latifolia Willd. Passing into many forms.

heterophylla Pursh.

graminea Michx.

Alisma L. Water Plantain.

Plantago-aquatica L.

HYDROCHARITACEAE

Elodea Michx. Water-weed.

canadensis Michx. Conn. river, etc.

Vallisneria [Mich] L. Tape Grass, Eel Grass.

spiralis L. Conn. river, etc.

GRAMINEAE

Andropogon [Royen] L. Beard Grass.

scoparius Michx.

virginicus L. Amherst.

furcatus Muhl.

Sorghastrum Nash.

nutan (L.) Nash. Indian Grass, Wood Grass.

Digitaria Scop. Finger Grass.

filiformis (L.) Koeler.

HUMIFUSA Pers. This and the preceding species constitute very troublesome lawn grasses.

SANGUINALIS (L.) Scop. Crab Grass.

Paspalum L.

setaceum Michx.

Panicum L. Panic Grass.

verrucosum Muhl. Springfield, island in Red House Pond.
Scribner & Merrill in *Rhodora*, Vol. III., p. 103.

capillare L. Old-witch Grass.

philadelphicum Bernh. Southwick, C. H. Bissell, *Rhodora*, V.
13, p. 54.

miliaceum L. European Millet. Waste places. Springfield,
Dr. W. H. Chapin.

dichotomiflorum Michx. Amherst, E. Tuckerman; Agawam,
Scribner & Merrill, *Rhodora*, Vol. III., p. 104.

virgatum L. Switch Grass.

agrostoides Spreng.

depauperatum Muhl.

- P. linearifolium** Scribn. Springfield, L. Andrews.
dichotomum L.
huachucae Ashe. var. *silvicola* Hitchc. & Chase.
Scribnerianum Nash. Mt. Holyoke, Scribner & Merrill in *Rhodora*, Vol. III., p. 112.
xanthophysum Gray. Amherst, H. G. Jesup; Springfield, Dr. W. H. Chapin. See Scribner & Merrill in *Rhodora*, Vol. III., p. 109.
clandestinum L.
latifolium L.
- Echinochloa** Beauv.
 CRUSGALLI (L.) Beauv. Barnyard Grass.
frumentacea (Roxb.) Link.
- Setaria** Beauv. Bristly Foxtail Grass.
 GLAUCA (L.) Beauv. Foxtail, Pigeon Grass.
 VIRIDIS (L.) Beauv. Green Foxtail, Bottle Grass.
 ITALICA (L.) Beauv. German Millet or Hungarian Grass.
- Cenchrus** L. Sandbur, Bur Grass. Amherst, Hadley, Springfield.
carolinianus Walt.
- Zizania** (Gronov.) L. Indian Rice, Water Oats.
palustris L. Northampton, Tuckerman & Jesup; Longmeadow, C. S. Plumb; Springfield, Dr. W. H. Chapin; Amherst.
- Leersia** Swartz. Cut-grass, White Grass.
virginica Willd. White Grass.
oryzoides (L.) Swartz. Rice Cut-grass.
- Phalaris** L. Canary Grass.
canariensis L. In waste places.
arundinacea L. Reed Canary Grass. Generally distributed.
arundinacea L. var. *PICTA* L. Ribbon Grass. Persistent near old dwellings.
- Anthoxanthum** L. Sweet Vernal Grass.
 ODORATUM L.
Puelii Lecoq & Lamotte. Mass. Agr. College.
- Hierochloa** (Gmel.) R. Br. Holy Grass.
odorata (L.) Wahlenb. Vanilla Grass. Agawam, Dr. W. H. Chapin.
- Oryzopsis** Michx. Mountain Rice.
pungens (Torr.) Hitchc.
asperifolia Michx.
racemosa (Sm.) Ricker.
- Aristida** L. Triple-awned Grass.
dichotoma Michx. Poverty Grass.
purpurascens Poir. Mt. Holyoke, E. Hitchcock; W. Springfield, Dr. J. W. Robbins.

Muhlenbergia Schreber.*sobolifera* (Muhl.) Trin.*tenuiflora* (Willd.) BSP.*sylvatica* Torr.*mexicana* (L.) Trin.*racemosa* (Michx.) BSP.*Schreberi* J. F. Gmel. Drop-seed, Nimble Will. Amherst, H. G. Jesup; South Hadley.*capillaris* (Lam.) Trin. Hair Grass. Sugarloaf; Mt. Holyoke.**Brachyelytrum** Beauv.*erectum* (Schreb.) Beauv.**Phleum** L.

PRATENSE L. Timothy, Herd's Grass.

Alopecurus L. Foxtail Grass.

PRATENSIS L. Meadow Foxtail.

geniculatus L. Floating Foxtail.*geniculatus* L. var. *aristulatus* Torr. Amherst, etc. E. Tuckerman; also by H. G. Jesup.**Sporobolus** R. Br. Drop-seed. Rush Grass.*vaginiflorus* (Torr.) Wood.*uniflorus* (Muhl.) Scribn. & Merr.**Agrostis** L. Bent Grass.

ALBA L. White Bent Grass.

ALBA L. var. *VULGARIS* (With.) Thurb. Red Top.*hyemalis* (Walt.) BSP.*perennans* (Walt.) Tuckerm. Thin Grass.

CANINA L. Rhode Island Bent Grass. In lawns, etc.

Calamagrostis Adans. Reed Bent Grass.*canadensis* (Michx.) Beauv. Blue-joint Grass.*inexpansa* Gray. Lock's Pond, Shutesbury; H. L. Clark, in *Rhoda*, Vol. I, p. 165.*cinnoides* (Muhl.) Barton.**Cinna** L. Wood Reed Grass.*arundinacea* L.**Holcus** L.

LANATUS L. Velvet Grass.

Sphenopholis Scribn.*obtusata* (Michx.) Scribn.*pallens* (Spreng.) Scribn.*palustris* (Michx.) Scribn. Amherst, Hitchc. Catal.**Trisetum** Persoon. Nonotuck, E. Tuckerman.*spicatum* (L.) Richter. Deerfield, H. G. Jesup.*flavescens* (L.) R. & S. Introduced in grass-seed.

Deschampsia Beauv.*flexuosa* (L.) Trin. Common Hair Grass.*caespitosa* (L.) Beauv. Hadley meadows, E. Tuckerman ; Mt. Toby, H. G. Jesup.*Avena* (Tourn.) L. Oat.*sativa* L. Waste places.*Arrhenatherum* Beauv. Oat Grass.*elatus* (L.) Beauv. Tall Oat Grass.*Danthonia* DC. Wild Oat Grass.*spicata* (L.) Beauv.*compressa* Aust. Shutesbury, etc. H. G. Jesup.*sericea* Nutt. Easthampton, Dr. N. A. Cobb.*Spartina* Schreb. Cord or Marsh Grass.*Michauxiana* Hitchc. Slough Grass. Shores of Connecticut River, E. Tuckerman.*Cynodon* Richard. Bermuda or Scutch Grass.*Dactylon* (L.) Pers. Amherst and Springfield.*Eleusine* Gaertn. Goose Grass. Yard Grass.*indica* Gaertn. Amherst, rare, E. Hitchcock ; Springfield, Mrs. M. E. Owen. Observed year after year.*Phragmites* Trin. Reed.*communis* Trin. South Amherst, E. Hitchcock.*Tridens* R. & S.*flavus* (L.) Hitchc. Tall Red Top. Sugarloaf, E. Hitchcock.*Eragrostis* Beauv.*hypnoides* (Lam.) BSP.*capillaris* (L.) Nees.*pilosa* (L.) Beauv. Amherst, E. Tuckerman ; Springfield, Dr. W. H. Chapin and elsewhere.

MEGASTACHYA (Koeler) Link.

minor Host. Amherst, rare, E. Tuckerman, 1875 ; more common since.*pectinacea* (Michx.) Steud.*Briza* L. Quaking Grass.*media* L. Amherst, rare, E. Tuckerman, 1875.*Dactylis* L. Orchard Grass.

GLOMERATA L.

Poa L. Meadow Grass. Spear Grass.

ANNUA L. Low Spear Grass.

COMPRESSA L. Canada Blue Grass. Wire Grass.

triflora Gilib. Fowl Meadow Grass.*pratensis* L. June Grass, Spear Grass. Kentucky Blue Grass.

TRIVIALIS L. Rough-stalked Meadow Grass.

- P. alsodes* Gray. North Amherst, H. L. Clark, in *Rhodora*,
Vol. I, p. 165.
nemoralis L. Hitchc. Catal ?
- Glyceria* R. Br. Manna Grass.
Torreyana (Spreng) Hitchc.
canadensis (Michx.) Trin. Rattlesnake Grass.
nervata (Willd.) Trin. Fowl Meadow Grass.
grandis Watson. Reed Meadow Grass.
pallida (Torr.) Trin.
fluitans (L.) R. Br.
acutiflora Torr. Amherst, E. Tuckerman ; Springfield.
- Festuca* L. Fescue Grass.
octoflora Walt.
OVINA L. Sheep's Fescue.
OVINA L. var. *duriuscula* (L.) Hoch.
OVINA L. var. *CAPILLATA* (Lam.) Hoch.
ELATIOR L. Taller or Meadow Fescue.
nutans Spreng. Mt. Tom.
- Bromus* L. Brome Grass.
secalinus L. Cheat or Chess Grass. Grain fields ; introduced in seed.
tectorum L. Waste places, local ; more common near the coast.
ciliatus L.
Kalmii Gray. Wild Chess Grass.
- Nardus* L. Mat Grass.
stricta L. Amherst, E. Tuckerman, 1871 ; mowings, Mt. Hermon (Gill.) See Britton and Brown Flora, Vol. I, p. 224.
- Lolium* L. Darnel.
PERENNE L. Common Darnel, Perennial Ray or Rye Grass.
- Agropyron* Gaertn.
REPENS L. Beauv. Couch, Quitch, Quick or Witch Grass.
caninum (L.) Beauv. Awned Wheat Grass. Mt. Holyoke, Lev-
erett, etc., E. Tuckerman.
- Elymus* L. Lyme Grass. Wild Rye.
virginicus L.
canadensis L.
striatus Willd.
- Hystrix* Moench. Bottle-brush Grass.
patula Moench.

CYPERACEAE

- Cyperus* [Tourn] L. Calingale.
diandrus Torr.
rivularis Kunth. Springfield, L. Andrews.

- C. aristatus* Rottb.
dentatus Torr.
esculentus L. Occasionally in cultivated fields.
erythrorhizus Muhl. Herb. Spfld Sci. Museum. Agawam river,
Mrs. M. L. Owen
ferax Rich. Hadley meadows, H. G. Jesup.
strigosus L.
filiculmis Vahl.
Dulichium Pers.
arundinaceum (L.) Britton.
Eleocharis R. Br. Spike Rush.
Robbinsii Oakes. Ponds.
olivacea Torr. Leverett pond, H. G. Jesup.
diandra C. Wright.
ovata (Roth.) R. & S.
obtusa (Willd.) Schultes.
palustris (L.) R. & S.
acicularis (L.) R. & S.
tenuis (Willd.) Schultes.
intermedia (Muhl.) Schultes.
Psilocarya Torr. Bald Rush.
scirpoides Torr. Pond shores, Springfield, Fernald; in *Rhodora*, Vol. X., p. 142.
Stenophyllus Raf.
capillaris (L.) Britton.
Fimbristylis Vahl.
Frankii Steud.
Scirpus [Tourn.] L. Bulrush or Club Rush.
planifolius Muhl.
hudsonianus (Michx.) Fernald.
subterminalis Torr. Aquatic.
debilis Pursh.
americanus Pers.
Torreyi Olney. Pond in Hadley meadows, etc., E. Tuckerman.
validus Vahl. Great Bulrush.
fluviatilis (Torr.) Gray. River Bulrush. South Hadley.
rubrotinctus Fernald. Amherst, H. L. Clark; in *Rhodora*, Vol. I, p. 165. Springfield, L. Andrews.
sylvaticus L. Herb. Spfld Sci. Museum. Springfield, L. Andrews.
atrovirens Muhl.
georgianus Harper. Springfield, L. Andrews.
polyphyllus Vahl.
lineatus Michx.
cyperinus (L.) Kunth. Wool Grass.

- S. cyperinus* var. *pelius* Fernald. Springfield, L. Andrews.
cyperinus (L.) Kunth. var. *condensatus* Fernald. Herb. Spfld
 Sci. Museum. Springfield, L. Andrews.
atrocinctus Fernald. Springfield, L. Andrews.
Eriophorum L. Cotton Grass.
callitrix Cham. Hare's Tail. Belchertown south pond, H. G.
 Jesup.
gracile Roth. Leverett, etc., E. Tuckerman; Amherst, H. G.
 Jesup.
tenellum Nutt. Springfield, L. Andrews.
angustifolium Roth.
viridi-carinatum (Engelm.) Fernald. Buckland, open wet grounds.
 F. F. Forbes; in *Rhodora*, Vol. VII, p. 91.
virginicum L.
Fuirena Rottb. Umbrella Grass.
squarrosa Michx. Indian Orchard, Mrs. M. L. Owen.
Hemicarpha Nees & Arn.
micrantha (Vahl.) Britton.
Rynchospora Vahl. Beak Rush.
macrostachya Torr. Belchertown and Leverett, E. Hitchcock,
 and later collectors: Franklin Co., Fernald; in
Rhodora, Vol. X., p. 142.
fusca (L.) Ait. f. Leverett pond, E. Tuckerman, H. G. Jesup.
alba (L.) Vahl.
glomerata (L.) Vahl.
Cladium P. Browne. Twig Rush.
mariscoides (Muhl.) Torr. Belchertown, Leverett, etc., E. Hitch-
 cock; Amherst, H. G. Jesup, and later collectors.
Scleria Berg. Nut Rush.
triglomerata Michx. Amherst, H. G. Jesup; Hadley, etc., E.
 Hitchcock.
Carex [Ruppius] L. Sedge.
scoparia Schkuhr.
scoparia var. *condensa* Fernald. Springfield, L. Andrews.
tribuloides Wahlenb.
siccata Dewey. Westfield, Rev. Dr. Davis.
mirabilis Dewey.
straminea Willd.
hormathodes Fernald.
festucea Schkuhr.
festucea Schkuhr. var. *brevior* (Dewey) Fernald. Herb. Spfld
 Sci. Museum.
adusta Boott. Hadley, etc., E. Tuckerman.
stellulata Good.

- C. *stellulata* var. *angustata* Carey. Springfield, L. Andrews.
scirpoides Schkuhr.
canescens L.
canescens L. var. *disjuncta* Fernald. Herb. Spfld. Sci. Museum.
brunnescens Poir.
bromoides Schkuhr.
Deweyana Schwein.
tenuiflora Wahlenb. Southampton.
trisperma Dewey.
tenella Schkuhr.
rosea Schkuhr.
retroflexa Muhl.
Muhlenbergii Schkuhr. Hadley, etc., E. Tuckerman.
Muhlenbergii Schkuhr. var. *enervis* Boott. Herb. Spfld Sci. Museum.
cephalophora Muhl.
sparganioides Muhl.
vulpinoidea Michx.
diandra Schrank. Deerfield, E. Hitchcock.
diandra Schrank. var. *ramosa* (Boott.) Fernald. Deerfield, E. Hitchcock.
stipata Muhl.
crinita Lam.
torta Boott.
stricta Lam.
aurea Nutt. Conway, H. G. Jesup.
pauciflora Lightf. Ashfield, Porter.
leptalea Wahlenb.
polygama Schkuhr.
triceps Michx. var. *hirsuta* (Willd.) Bailey.
virescens Muhl.
formosa Dewey. Amherst, Hitchc. Catal.;
Davisii Schwein & Torr. North Hadley, E. Tuckerman.
gracillima Schwein.
Backii Boott. Mt. Tom, Prof. W. D. Whitney.
umbellata Schkuhr.
varia Muhl.
novae-angliae Schwein.
pennsylvanica Lam.
pubescens Muhl.
livida (Wahlenb.) Willd.
tetanica Schkuhr. Amherst, Hitchc. Cata'.
polymorpha Muhl. Westfield, Rev. Dr. Davis.
pallescent L.

- C.** *limosa* L. Ashfield, Porter.
prasina Wahlenb.
pedunculata Muhl. Mt. Holyoke, etc., E. Tuckerman; Mt. Toby,
H. G. Jesup.
plantaginea Lam Mt Toby, H. G. Jesup; Rocky Mountain,
Greenfield, Dr. N. A. Cobb.
platyphylla Carey. Mt. Holyoke, etc., E. Tuckerman and H. G.
Jesup; Mt. Toby, H. G. Jesup.
laxiculmis Schwein. Amherst, etc.
digitalis Willd.
laxiflora Lam.
laxiflora Lam. var. *patulifolia* (Dewey) Carey.
laxiflora Lam. var. *blanda* (Dewey) Boott.
conoidea Schkuhr.
grisea Wahlenb.
glaucodea Tuckerm. Mt. Holyoke, etc., E. Tuckerman and H.
G. Jesup.
granularis Muhl. Amherst, E. Hitchcock, and northward.
flava L.
longirostris Torr.
arctata Boott. Leyden, E. Hitchcock; Easthampton, Dr. N. A.
Cobb.
debilis Michx.
debilis Michx. var. *Rudgei* Bailey.
scabrata Schwein.
filiformis L.
lanuginosa Michx.
vestita Willd.
trichocarpa Muhl. Amherst, Hitchc. Catal.
riparia W. Curtis.
squarrosa L. Hadley, E. Hitchcock; South Hadley, H. G.
Jesup.
comosa Boott.
hystericina Muhl.
lurida Wahlenb. Fernald in *Rhodora*, Vol. III, p. 56.
lurida X *lupulina* Bailey. Fernald in *Rhodora*, Vol. III, p. 56.
retrorsa Schwein.
lupulina Muhl. Amherst, Fernald; in *Rhodora*, Vol. III, p. 56.
intumescens Rudge.
folliculata L.
vesicaria L.
rostrata Stokes var. *utriculata* (Boott.) Bailey.
Tuckermani Dewey.

ARACEAE

Arisaema Martins. Indian Turnip. Dragon Arum.

triphyllum (L.) Schott. Indian Turnip. Jack-in-the-Pulpit.

Dracontium (L.) Schott. Green Dragon. Dragon Root. Deerfield. *Rhodora*, Vol. XII, p. 169. Sunderland, Belchertown, South Hadley. This rare plant is now extinct in some of the former stations.

Peltandra Raf. Arrow Arum.

virginica (L.) Kunth. Belchertown.

Calla L. Water Arum.

palustris L.

Symplocarpus Salisb. Skunk Cabbage.

foetidus (L.) Nutt.

Orontium L. Golden Club.

aquaticum L. Hampton pond, E. Tuckerman; Southwick, Porter; Springfield, S. Stebbins. Rare; Westfield; Slow brook, east of Mt. Tom, Dr. N. A. Cobb.

Acorus L. Sweet Flag. Calamus.

Calamus L.

LEMNACEAE

Spirodela Schleiden.

polyrhiza (L.) Schleid.

Lemna L. Duckweed. Duck's-meat.

trisolca L.

minor L.

ERIOCAULACEAE

Eriocaulon [Gronov.] L. Pipewort.

articulatum (Huds.) Morong.

XYRIDACEAE

Xyris [Gronov.] L. Yellow-eyed Grass.

montana Ries. Lock's pond, Shutesbury, etc.; E. Tuckerman, H. G. Jesup.

caroliniana Walt. Indian Orchard. Herb. Spfld Sci. Museum.

flexuosa Muhl. Shutesbury, H. G. Jesup. Bay St., Springfield, etc.

COMMELINACEAE

Tradescantia (Rupp.) L. Spiderwort.

virginiana L. Occasionally escaped.

Commelina (Plum.) L.

COMMUNIS L. Springfield, L. Andrews.

PONTEDERIACEAE

- Pontederia* L. Pickerel Weed.
cordata L.
cordata L. var. *angustifolia* Torr.
Heteranthera R. and P. Mud Plantain.
dubia (Jacq.) MacM.

JUNCACEAE

- Juncus* [Tourn.] L. Rush. Bog Rush.
bufonius L.
tenuis Willd.
filiformis L. Hadley meadows, E. Tuckerman.
effusus L. Common or Soft Rush.
brevicaudatus (Engelm.) Fernald. Mt. Toby, H. G. Jesup. Spring-field, L. Andrews.
canadensis J. Gay. Mt. Toby, H. G. Jesup.
pelocarpus Meyer. Shores of Lock's pond, etc., E. Tuckerman ;
 Leverett pond, H. G. Jesup. Indian Orchard.
nodosus L. Hockanum, Whitmore's Ferry, etc., E. Tuckerman.
acuminatus Michx.
articulatus L. Mill Hollow, Amherst, etc., E. Tuckerman and H.
 G. Jesup.
marginatus Rostk. Amherst, etc., E. Tuckerman.
Luzula DC. Wood Rush.
saltuensis Fernald.
campestris (L.) DC.

LILIACEAE

- Veratrum* [Tourn.] L. False Hellebore.
viride Ait. American White Hellebore. Indian Poke.
Uvularia L. Bellwort.
perfoliata L.
Oakesia Watson.
sessilifolia (L.) Watson.
Allium [Tourn.] L. Onion. Garlic.
tricoccum Ait. Wild Leek.
canadense L. Wild Garlic.
Hemerocallis L. Day Lily.
 FULVA L. Common Day Lily. Escaped from cultivation.
Lilium L. Lily.
philadelphicum L. Wild Orange-red Lily or Wood Lily.
superbum L. Turk's-cap Lily.
canadense L. Wild Yellow Lily.

- Erythronium* L. Dog's tooth Violet.
americanum Ker. Yellow Adder's Tongue.
Ornithogalum [Tourn.] L. Star of Bethlehem.
 UMBELLATUM L. More or less common throughout the range.
Muscari [Tourn.] Mill. Grape Hyacinth.
botryoides (L.) Mill. Amherst. Persistent for many years.
Asparagus [Tourn.] L. Asparagus.
officinalis L. Garden Asparagus.
Clintonia Raf.
borealis (Ait.) Raf.
Smilacina Desf. False Solomon's Seal.
racemosa (L.) Desf. False Spikenard.
stellata (L.) Desf.
trifolia (L.) Desf. Pelham and Cummington, E. Hitchcock.
 Plumtrees, Sunderland.
Maianthemum (Weber in.) Wiggers.
canadense Desf.
Streptopus Michx. Twisted Stalk.
amplexifolius (L.) DC. Pelham, Deerfield, E. Tuckerman. Mt.
 Toby.
roseus Michx. Mt. Toby, etc.
Polygonatum [Tourn.] Hill. Solomon's Seal.
biflorum (Walt.) Ell. Small Solomon's Seal.
commutatum (R. and S.) Dietr. Great Solomon's Seal.
Convallaria L. Lily of the Valley.
 MAJALIS L. Escaped from cultivation.
Medeola [Gronov.] L. Indian Cucumber Root.
virginiana L.
Trillium L. Wake Robin. Birthroot.
erectum L.
grandiflorum (Michx.) Salisb. Pelham, E. Hitchcock. Not found
 in recent years.
cernuum L.
undulatum Willd. Painted Trillium.
Aletris L. Colic Root.
farinosa L.
Smilax [Tourn.] L. Green Brier.
herbacea L. Carrion Flower.
rotundifolia L. Common Green Brier.

AMARYLLIDACEAE

- Hypoxis* L. Star Grass.
hirsuta (L.) Coville.

IRIDACEAE

- Iris* [Tourn.] L. Fleur-de-lis.
versicolor L. Larger Blue Flag.
germanica L. Fleur-de-lis. Mt. Toby, H. L. Clark in *Rhodora*,
 Vol. I, page 165.
Belamcanda Adans. Blackberry Lily.
chinensis (L.) DC. Escaped, South Hadley, Mrs. C. S. Phelps.
Sisyrinchium L. Blue-eyed Grass.
mucronatum Michx.
angustifolium Mill.
gramineum Curtis.
atlanticum Bicknell.

ORCHIDACEAE

- Cypripedium* L. Lady's Slipper. Moccasin Flower.
arietinum R. Br. Ram's Head Lady's Slipper. Mt. Toby, W. S. Clark. This is the only station which we know in this region, and it is often found here quite plentifully.
parviflorum Salisb. Smaller Yellow Lady's Slipper. Mt. Holyoke, E. Tuckerman; Shelburne, F. G. Tuckerman; Hawley, Buckland, W. D. Forbes; Northfield, Shutesbury, etc. A cross apparently between *parviflorum* and *pubescens* is found on the banks of the Conn. river at Gill, E. H. Sharpe.
parviflorum Salisb. var. *pubescens* (Willd.) Knight. Larger Yellow Lady's Slipper.
hirsutum Mill. Showy Lady's Slipper. Deerfield, E. Hitchcock; Easthampton, W. S. Clark; Mt. Holyoke, H. G. Jesup; Hawley, W. D. Forbes; Mt. Toby, C. S. Plumb, 1880. This plant has become exterminated in many of the stations enumerated above due to the activities of professional collectors.
acaule Ait. Stemless Lady's Slipper. A white flowered form is frequently found.
Orchis [Tourn.] L.
spectabilis L. Showy Orchis.
Habenaria Willd. Rein Orchis. Fringed Orchis.
bracteata (Willd.) R. Br. Rather common in mountainous regions.
flava (L.) Gray.
hyperborea (L.) R. Br.
dilatata (Pursh.) Gray. Plumtrees Swamp, Sunderland, etc.

- H. clavellata* (Michx.) Spreng.
Hookeri Torr.
orbiculata (Pursh.) Torr.
ciliaris (L.) R. Br. Yellow Fringed Orchis. East Amherst, C.H. Hitchcock; Easthampton, W. S. Clark. Rare and extremely local plant; not collected for several years in this region.
blephariglottis (Willd.) Torr. White Fringed Orchis.
blephariglottis (Willd.) Torr. var. *holopetala* (Lindl.) Gray. Hawley, W. D. Forbes.
blephariglottis (Willd.) Torr. X *H. lacera* (Michx.) R. Br. A form has been noted by W. D. Forbes in Hawley, a cross between the above named.
lacera (Michx.) R. Br. Ragged Fringed Orchis.
psycodes (L.) Sw. This species much resembles the following. Both are called Purple Fringed Orchis.
fimbriata (Ait.) R. Br.
Pogonia Juss.
ophioglossoides (L.) Ker.
trianthophora (Siv.) BSP. Deerfield, E. Hitchcock; Conway.
verticillata (Willd.) Nutt. Amherst, Deerfield, E. Tuckerman; Mt. Holyoke (Notch); Longmeadow, Springfield, West Northfield; N. Leverett, Miss Ruby Hemenway; Easthampton, W. S. Clark, 1844; Belcher-town, Mrs. E. W. Carpenter and Marion Thompson.
affinis Aust. Holyoke range, H. L. Clark; in *Rhodora*, Vol. I, p. 165.
Calopogon R. Br.
pulchellus (Sw.) R. Br.
Arethusa [Gronov.] L.
bulbosa L.
Spiranthes Richard. Ladies' Tresses.
gracilis (Bigelow) Beck.
vernalis Englem. and Gray. Buckland, W. D. Forbes.
lucida (H. H. Eaton) Ames. Amherst, G. L. Goodale; Conway, H. G. Jesup; Buckland, W. D. Forbes; Colrain, E. F. Williams.
cernua (L.) Richard.
Epipactis (Haller) Boehm. Rattlesnake Plantain.
repens (L.) Crantz.
repens (L.) Crantz. var. *ophioides* (Fernald) A. A. Eaton. Southwick; M. L. Fernald in *Rhodora*, Vol. I, p. 6.
tesselata (Lodd) A. A. Eaton. Springfield, L. Andrews.
decipiens (Hook) Ames. Buckland, W. D. Forbes. But one specimen of the plant found by Mr. Forbes.
pubescens (Willd.) A. A. Eaton.

Listera R. Br. Twayblade.

cordata (L.) R. Br. Plainfield, Porter.

Corallorrhiza [Haller] R. Br. Coral Root.

trifida Chatelain. Amherst, W. S. Clark; Buckland, W. D. Forbes; Sunderland, Plumtrees Swamp; Leverett, Mt. Toby and Pelham.

maculata Raf. Easthampton, E. Hitchcock; Mt. Toby, H. G. Jesup; N. Leverett, R. E. Torrey; Buckland, W. D. Forbes; Mt. Holyoke, Amherst.

odontorrhiza Nutt.

Microstylis (Nutt.) Eaton. Adder's Mouth.

monophyllos (L.) Lindl. Hawley, W. D. Forbes.

unifolia (Michx.) BSP. Deerfield, E. Hitchcock; Shutesbury, E. H. Sharpe; Springfield, Dr. W. H. Chapin; Belchertown, R. E. Torrey.

Liparis Richard. Twayblade.

lilifolia (L.) Richard.

Loeselii (L.) Richard. Plumtrees swamp, Sunderland, A. V. Osmun; Amherst, H. L. Clark; Mt. Toby.

Aplectrum (Nutt.) Torr. Putty Root. Adam-and-Eve.

hyemale (Muhl.) Torr. Mt. Holyoke, Conway, E. Hitchcock; Buckland, W. D. Forbes.

Tipularia Nutt. Crane Fly Orchis.

discolor (Pursh) Nutt. Deerfield, E. Hitchcock. Probably not in our range; never verified by other collectors.

DICOTYLEDONEAE

SALICACEAE

Salix [Tourn.] L. Willow. Osier.

nigra Marsh. Black Willow.

nigra Marsh. var. *falcata* (Pursh) Torr. Springfield, L. Andrews.

lucida Muhl. Shining Willow.

FRAGILIS L. Crack Willow.

ALBA L. White Willow.

ALBA L. var. *VITELLINA* (L.) Koch.

Babylonica L. Weeping Willow. Sometimes escapes to river banks, etc.

longifolia Muhl. Sand Bar Willow. Islands of Conn. river, H. G. Jesup.

cordata Muhl.

- S.** *pedicellaris* Pursh. Deerfield, E. Tuckerman.
discolor Muhl. Glaucous Willow.
humilis Marsh. Prairie Willow.
tristis Ait. Dwarf Gray Willow.
sericea Marsh. Silky Willow.
rostrata Richards.
 PURPUREA L. Purple Willow. Near Conway, H.G. Jesup; Glenwood, Springfield.
Populus [Tourn.] L. Poplar. Aspen.
alba L. White Poplar. Silver Leaved Poplar.
tremuloides Michx. American Aspen.
grandidentata Michx. Large-toothed Aspen.
balsamifera L. Balsam Poplar.
candicans Ait. Balm of Gilead.
deltoides Marsh. Cottonwood. Necklace Poplar.
 NIGRA L. Black Poplar. Occasionally spreading by root suckers. var. *ITALICA* Du Roi. Rarely, if ever, spreading.

MYRICACEAE

Myrica L.

- Gale* L. Sweet Gale. Gill, E. H. Sharpe; Shutesbury, R. E. Torrey; Belchertown, etc.
carolinensis Mill. Bayberry. Wilbraham, E. Longfellow, Dr. W. H. Chapin; Conway, etc. Much more common near the coast.
asplenifolia L. Sweet Fern.

JUGLANDACEAE

Juglans L. Walnut.

- cinerea* L. Butternut.
nigra L. Black Walnut. Native in Amherst, etc., but rare in our range.

Carya Nutt. Hickory.

- ovata* (Mill.) K. Koch. Shagbark Hickory.
alba (L.) K. Koch. Mocker Nut.
glabra (Mill.) Spach. Pig Nut.
cordiformis (Wang.) K. Koch. Bitter Nut.

BETULACEAE

- Corylus* [Tourn.] L. Hazelnut. Filbert.
americana Walt. Hazelnut. Prof. S. T. Maynard discovered some years ago a purple-leaved hazelnut near Mt. Toby, which has been propagated as a horticultural variety.
rostrata Ait. Beaked Hazelnut.
Ostrya (Mich.) Scop. Leverwood.
virginiana (Mill.) K. Koch. Hop Hornbeam.
Carpinus [Tourn.] L. Ironwood.
caroliniana Walter. Blue or Water Beech.
Betula [Tourn.] L. Birch.
lenta L. Sweet or Black Birch.
lutea (Michx.) f. Yellow or Gray Birch.
populifolia Marsh. White or Gray Birch.
alba L. var. *papyrifera* (Marsh) Spach. Paper, Canoe or White Birch.
pumila L. Low or Swamp Birch. Amherst region. Eaton Man.
Alnus [Tourn.] Hill. Alder.
crispa (Ait.) Pursh. Conway; Deerfield, H. G. Jesup.
mollis Fernald. Downy Green Alder. Buckland, M. L. Fernald in *Rhodora*, Vol. VI, p. 163.
incana (L.) Muench. Speckled or Hoary Alder.
rugosa (Du Roi) Spreng. Smooth Alder.

FAGACEAE

- Fagus* [Tourn.] L. Beech.
grandifolia Ehrh. More common on our western border, where it forms large forests.
Castanea [Tourn.] Hill. Chestnut.
dentata (Marsh.) Borkh.
Quercus [Tourn.] L. Oak.
alba L. White Oak.
bicolor Willd. Swamp White Oak.
prinoides Willd. Chinquapin Oak.
Prinus L. Chestnut Oak.
rubra L. Red Oak.
palustris Muench. Pin Oak. More or less common in Conn. Valley lowlands.
coccinea Muench. Scarlet Oak.
velutina Lam. Yellow-barked or Black Oak.
ilicifolia Wang. Bear or Black Scrub Oak.

URTICACEAE

- Ulmus* [Tourn.] L. Elm.
 fulva Michx. Slippery Elm. Local.
 americana L. American Elm.
Celtis [Tourn.] L. Nettle-tree. Hackberry.
 occidentalis L. Sugarberry. Local.
 occidentalis L. var. *pumila* Muhl. Mt. Holyoke, H. G. Jesup.
 occidentalis L. var. *crassifolia* (Lam.) Gray. Hadley, E. Tuckerman; Amherst.
Cannabis [Tourn.] L. Hemp.
 SATIVA L.
Humulus L. Hop.
 Lupulus L. Common Hop.
 japonicus Sieb. and Zucc. Clay-pit dumping ground, Springfield, L. Andrews.
Morus [Tourn.] L. Mulberry.
 rubra L. Red Mulberry. Uncommon.
 ALBA L. White Mulberry. Amherst, etc.
Urtica [Tourn.] L. Nettle.
 gracilis Ait.
 URENS L.
Laportea Gaud. Wood Nettle.
 canadensis (L.) Gaud.
Pilea Lindl. Richweed.
 pumila (L.) Gray.
Boehmeria Jacq. False Nettle.
 cylindrica (L.) Sw.
Parietaria [Tourn.] L. Pellitory.
 pennsylvanica Muhl. Sugar Loaf, Mt. Toby, etc.

SANTALACEAE

- Comandra* Nutt. Bastard Toad-flax.
 umbellata (L.) Nutt.

LORANTHACEAE

- Arceuthobium* Bieb.
 pusillum Peck. Dwarf Mistletoe. Parasitic on Black Spruce.

ARISTOLOCHIACEAE

- Asarum* [Tourn.] L. Wild Ginger.
 canadense L.
Aristolochia [Tourn.] L. Birthwort.
 Serpentaria L. Virginia Snakeroot. Included in Dr. Tuckerman's list as from Turners Falls, but doubtful.

POLYGONACEAE

- Rumex** L. Dock. Sorrel.
Patentia L., Patience Dock. Rather uncommon.
Britannica L. Great Water Dock. Amherst, etc., H. G. Jesup.
 CRISPUS L. Yellow Dock.
 SANGUINEUS L. See Britton and Brown's Ill. Flora of n. U. S. and Can., Vol. I, p. 551.
 ELONGATUS Guss. Orchard St., Springfield, L. Andrews.
altissimus Wood. Pale Dock. Herb. Spfld Sci. Museum.
verticillatus L. Swamp Dock. Granby, H. G. Jesup.
 OBTUSIFOLIUS L. Bitter Dock.
 ACETOSA L. Garden Sorrel. Grass land. Common at Amherst, etc.
 HASTATULUS Baldw. Roadsides, Amherst, S. T. Maynard.
 ACETOSELLA L. Field or Sheep Sorrel.
- Polygonum** [Tourn.] L. Knotweed.
aviculare L.
aviculare L. var. *vegetum* Ledeb.
erectum L.
tenue Michx.
lapathifolium L.
amphibium L.
Muhlenbergii (Meisn.) Wats. Springfield, L. Andrews.
pennsylvanicum L.
Careyi Olney. East Amherst, etc., C. H. Hitchcock.
Hydropiper L. Common Smartweed.
acre HBK. Water Smartweed.
acre HBK. var. *leptostachyum* Meisn. Herb. Spfld Sci. Museum, L. Andrews.
 ORIENTALE L. Prince's Feather.
 PERSICARIA L. Lady's Thumb. Common in barnyards, etc.
hydropiperoides Michx. Mild Water Pepper.
virginianum L.
arifolium L. Halberd-leaved Tear-thumb.
sagittatum L. Arrow-leaved Tear-thumb.
 CONVULVULUS L. Black Bindweed.
cilinode Michx.
scandens L. Climbing False Buckwheat.
cuspidatum Sieb. and Zucc. Springfield, L. Andrews. Two species, *P. Sachalinense* Schmidt and *cuspidatum*, have been cultivated at the Mass. Agricultural College for 15 years. The latter is well established; the former, termed *Sacaline*, does not show a tendency to become so. Both were introduced from Japan as forage plants.

Fagopyrum [Tourn.] L. Buckwheat.

ESCULENTUM Muench. Buckwheat. In waste places and persisting after cultivation.

Polygonella Michx.

articulata (L.) Meisn.

CHENOPODIACEAE

Kochia Roth.

Scoparia (L.) Schrad. Springfield, escaped from gardens, L. Andrews.

Chenopodium [Tourn.] L.

BOTRYS L. Jerusalem Oak.

ambrosioides L. Mexican Tea. Springfield, L. Andrews.

capitatum (L.) Asch. Strawberry Blite. Rare, E. Hitchcock.

HYBRIDUM L. Maple-leaved Goosefoot.

ALBUM L. Lamb's Quarters.

ALBUM L. var. *VIRIDE* (L.) Moq. Springfield, L. Andrews.

Salsola L. Saltwort.

Kali L. var. *tenuifolia* G. F. W. Mey. Russian Thistle. Occasionally on railroad banks, etc.; the seed coming in with grass seed and also by western freight. Slightly established at B. & M. R. R. station, Amherst, S. C. Brooks (1910), and at Springfield, Dr. W. H. Chapin.

AMARANTHACEAE

Amaranthus [Tourn.] L. Amaranth.

RETROFLEXUS L. Green Amaranth; Pigweed.

hybridus L.

hybridus L. forma *hypochondriacus* L. Green Amaranth. Springfield, L. Andrews.

paniculatus L. Purple Amaranth. Springfield, L. Andrews.

GRAECIZANS L. Tumble Weed.

spinosus L. Thorny Amaranth. Herb. Spfld Sci. Museum, and Herb. Mt. Holyoke College.

PHYTOLACCACEAE

Phytolacca [Tourn.] L. Pokeweed.

decandra L.

NYCTAGINACEAE

Oxybaphus L' Her.

nyctagineus (Michx.) Sweet. Springfield, L. Andrews.

ILLECEBRACEAE

Scleranthus L. Knawel.

ANNUUS L.

Anychia Michx. Forked Chickweed.

canadensis (L.) BSP.

AIZOACEAE

Mollugo L. Indian Chickweed.

VERTICILLATA L. Carpet Weed.

CARYOPHYLLACEAE

Spergularia J. and C. Presl. Sand Spurrey.

rubra (L.) J. and C. Presl. Common on roadsides.

Spergula L.

ARVENSIS L. Corn Spurrey.

Sagina L. Pearlwort.

decumbens (Ell.) T. and G. Springfield, M. L. Owen (1883); Amherst, H. G. Jesup.

procumbens L.

Arenaria L. Sandwort.

lateriflora L.

SERPILLIFOLIA L. Thyme-leaved Sandwort.

stricta Michx.

Stellaria L. Chickweed. Starwort.

borealis Bigel.

uliginosa Murr. South Deerfield, H. G. Jesup.

longifolia Muhl.

GRAMINEA L. Amherst, etc.; now common.

MEDIA (L.) Cyrill. Common Chickweed.

Cerastium L. Mouse-ear Chickweed.

arvense L. Field Mouse-ear Chickweed. Plumtrees, Sunderland; Mt. Toby.

arvense L. var. *oblongifolium* (Torr.) Hollick and Britton. Mt. Tom, June, 1882; Herb. Mt. Holyoke College.

VULGATUM L. Common Mouse-ear Chickweed. Now very common, but included by mistake in Prof. Tucker-man's list; he not having observed it in 1875.

VISCOSUM L.

nutans Raf. Hadley, etc.

Agrostemma L. Corn Cockle.

Githago L. In grain fields, etc.

Lychnis [Tourn.] L. Campion.

FLOS-CUCULI L. Ragged Robin. Found in grass lands. Amherst, etc. Spreading, and becoming well established.

DIOICA L. Red Campion. Roadsides, etc.

alba Mill. White Campion. Amherst, A. V. Osmun. Springfield, L. Andrews.

Silene L. Catchfly.

antirrhina L. Sleepy Catchfly.

Armeria L. Sweet William Catchfly. Springfield, L. Andrews.

noctiflora L. Night-flowering Campion.

pennsylvanica Michx. Wild Pink.

stellata (L.) Ait. f. Starry Campion. South Hadley.

LATIFOLIA (Mill.) Britten & Rendle. Bladder Campion. Amherst, etc.

Saponaria L.

OFFICINALIS L. Bouncing Bet.

Gypsophila L.

muralis L. Springfield, etc.

paniculata L. Tall Gypsophyll. Springfield, L. Andrews.
See Britton & Brown's *Illustrated Flora*, Vol. II, p. 17.

Dianthus L. Pink. Carnation.

ARMERIA L. Deptford Pink.

PORTULACACEAE

Claytonia [Gronov.] L. Spring Beauty.

virginica L.

caroliniana Michx. Amherst, H. G. Jesup.

Portulaca [Tourn.] L. Purslane.

OLERACEA L. Common Purslane. A pernicious weed.

grandiflora Hook. Occasionally escaped.

CERATOPHYLLACEAE

Ceratophyllum L. Hornwort.

demersum L. Ponds, etc.

NYMPHAEACEAE

Nymphaea [Tourn.] L. Yellow Pond Lily. Spatter-dock.

advena Ait. Cow Lily.

microphylla Pers. Conn. river, ponds, etc.

Castalia Salisb. Water Lily.

tetragona Georg. Pansy Park, Belchertown. Escaped from cultivation. L. W. Goodell.

odorata (Ait.) Woodville & Wood. Sweet-scented Water Lily.

Brasenia Schreber. Water Shield.

Schreberi Gmel.

RANUNCULACEAE

Ranunculus [Tourn.] L. Crowfoot. Buttercup.

circinatus Sibth. Stiff Water Crowfoot. Belchertown; Herb. Mt. Holyoke College.

aquatilis L. var. *capillaceus* DC. Common White Water Crowfoot.

delphinifolius Torr. Yellow Water Crowfoot.

laxicaulis (T. & G.) Darby. Water Plaintain. Spearwort.

Flammula L. var. *reptans* (L.) Mey. Creeping Spearwort. Shore of Conn. river.

sceleratus L. Cursed Crowfoot.

abortivus L. Small-flowered Crowfoot.

recurvatus Poir. Hooked Crowfoot.

fascicularis Muhl. Early Crowfoot.

septentrionalis Poir. Swamp Buttercup.

hispidus Michx. Longmeadow; Herb. Spfld Sci. Museum.

pennsylvanicus L. f. Bristly Crowfoot.

BULBOSUS L. Bulbous Buttercup.

ACRIS L. Tall Buttercup.

ACRIS L. var. *STEVENI* (Andrz.) Lange. Northampton; M. L. Fernald in *Rhodora*, Vol. I, p. 229.

Thalictrum [Tourn.] L. Meadow Rue.

dioicum L. Early Meadow Rue.

polygamum Muhl. Tall Meadow Rue.

Anemonella Spach.

thalictroides (L.) Spach. Rue Anemone.

Hepatica (Rupp.) Hill. Liverleaf. Hepatica.

triloba Chaix.

acutiloba DC. Conway, etc., H. G. Jesup; Amherst, E. L. Morris; Mt. Holyoke, etc.

Anemone [Tourn.] L. Anemone.

cylindrica Gray. Mt. Toby, H. G. Jesup, Aug., 1872; Sunderland.

virginiana L.

canadensis L. South Hadley, G. L. Goodale.

quinquefolia L. Wood Anemone.

- Clematis* L. Virgin's Bower.
virginiana L.
verticillaris DC. Greenfield, F. G. Tuckerman; Notch, Mt. Holyoke; Table Mountain, Mt. Toby; Mt. Tom; South Hadley; Rattlesnake Gutter, Leverett.
- Caltha* [Rupp.] L. Marsh Marigold.
palustris L.
- Coptis* Salisb. Goldthread.
trifolia (L.) Salisb.
- Aquilegia* [Tourn.] L. Columbine.
canadensis L. Wild Columbine.
- Cimicifuga* L. Bugbane.
racemosa (L.) Nutt. Black Snakeroot. Black Cohosh. Goshen, E. Hitchcock.
- Actaea* L. Baneberry. Cohosh.
rubra (Ait.) Willd. Red Baneberry.
alba (L.) Mill. White Baneberry.

MAGNOLIACEAE

- Magnolia* L.
tripetala L. Umbrella Tree. Dr. W. H. Chapin has observed several of these trees, which have existed for a number of years on the shores of a pond in Springfield; and also in Edgewood Swamp stands a tree about nine years old. Both these stations are at least two miles away from any cultivated *M. tripetala* trees, and were probably seeded in through the agency of birds.
- Liriodendron* L. Tulip Tree.
- Tulipifera* L. Deerfield, E. Hitchcock; Gill, Bernardston, Southampton, Agawam, Huntington, etc.

MENISPERMACEAE

- Menispermum* [Tourn.] L. Moonseed.
canadense L.

BERBERIDACEAE

- Podophyllum* L. May Apple. Mandrake.
peltatum L. South Amherst, E. Hitchcock.
- Caulophyllum* Michx. Blue Cohosh.
thalictroides (L.) Michx. Pappoose Root.
- Berberis* [Tourn.] L. Barberry.
 VULGARIS L. Common Barberry. Pastures, etc. More common near the coast.

LAURACEAE

Sassafras Nees.

variifolium (Salisb.) Ktze.

Benzoin Fabric. Wild Allspice. Fever Bush.

aestivale (L.) Nees. Spice Bush. Benjamin Bush.

PAPAVERACEAE

Sanguinaria (Dill.) L. Blood Root.

canadensis L.

Chelidonium [Tourn.] L. Celandine.

MAJUS L.

FUMARIACEAE

Adlumia Raf. Climbing Fumitory.

fungosa (Ait.) Greene. Mt. Toby, etc.

Dicentra Bernh.

Cucullaria (L.) Bernh. Dutchman's Breeches. Westfield, C. S. Plumb; North Amherst, Northampton, South Hadley.

canadensis (Goldie) Walp. Squirrel Corn. Conway, G. L. Goodale; Leverett, E. H. Sharpe.

Corydalis (Dill.) Medic.

sempervirens (L.) Pers. Pale Corydalis.

Fumaria [Tourn.] L. Fumitory.

OFFICINALIS L. Common Fumitory.

CRUCIFERAE

Berteroa DC.

INCANA (L.) DC. Springfield, Mrs. A. J. Smith and Dr. W. H. Chapin; Amherst, R. E. Torrey. Introduced in seed and spreading rapidly.

Alyssum [Tourn.] L.

alyssoides L. Amherst, etc.

Lepidium [Tourn.] L. Pepperwort. Peppergrass.

virginicum L. Wild Peppergrass.

apetalum Willd. Springfield, Miss M. L. Owen.

CAMPESTRE (L.) R. Br. Amherst.

Capsella Medic. Shepherd's Purse.

BURSA-PASTORIS (L.) Medic.

Camelina Crantz. False Flax.

SATIVA (L.) Crantz.

microcarpa Andr. Greenfield, E. F. Williams. *Rhodora*, Vol. XII, p. 169.

- Raphanus** [Tourn.] L. Radish.
 RAPHANISTRUM L. Wild Radish. Jointed Charlock.
- Brassica** [Tourn.] L. Mustard. Turnip.
 ALBA (L.) Boiss. White Mustard.
juncea (L.) Cosson. Herb. Spfld Sci. Museum.
 NIGRA (L.) Koch. Black Mustard.
campestris L. Rutabaga. More or less common in waste places.
- Conringia** (Heist.) Link. Hare's-ear Mustard.
orientalis (L.) Dumort. Belchertown, R. E. Torrey.
- Sisymbrium** [Tourn.] L. Hedge Mustard.
 OFFICINALE (L.) Scop.
officinale (L.) Scop. var. *leiocarpum* DC. Herb. Spfld Sci. Mus.
- Erysimum** [Tourn.] L. Treacle Mustard.
cheiranthoides L. Worm-seed Mustard. Mt. Toby, H. G. Jesup; Sunderland.
- Radicula** (Dill.) Hill. Water Cress.
 NASTURTIUM-AQUATICUM (L.) Britten & Rendle. True Water Cress. More or less common in brooks.
 SYLVESTRIS (L.) Druce. Yellow Cress.
palustris (L.) Muench. Marsh Cress.
palustris (L.) Muench. var. *hispida* (Desv.) Robinson. Leverett pond, R. E. Torrey.
 ARMORACIA (L.) Robinson. Horse-radish. Persistent and spreading around old dwellings.
- Barbarea** R. Br. Winter Cress.
 VULGARIS R. Br. Common Winter Cress. Yellow Rocket.
stricta Andr. Longmeadow; Herb. Spfld Sci. Museum.
- Dentaria** [Tourn.] L. Toothwort. Pepper-root.
diphylla Michx.
maxima Nutt. Springfield, Miss G. L. Pettis.
laciniata Muhl. Deerfield, E. Hitchcock; Springfield, Miss G. L. Pettis; Amherst and Sunderland.
- Cardamine** [Tourn.] L. Bitter Cress.
bulbosa (Schreb.) BSP. Spring Cress.
pratensis L. Cuckoo Flower. Amherst, A. V. Osmun; Conway.
parviflora L.
pennsylvanica Muhl.
- Arabis** L. Rock Cress.
lyrata L. Mt. Tom, S. Stebbins.
Drummondii Gray.
hirsuta (L.) Scop.
laevigata (Muhl.) Poir.
canadensis L. Sickle-pod.
- Isates**
tinctoria L. Dyer's Wood. Amherst, Mass. Agr. College grounds.
 See *Cyclopedia of Am. Hort.*, Bailey, p. 836.

SARRACENIACEAE

- Sarracenia* [Tourn.] L.
purpurea L. Pitcher-plant.

DROSERACEAE

- Drosera* L. Sundew.
rotundifolia L. Round-leaved Sundew.
longifolia L.

PODOSTEMACEAE

- Podostemum* Michx. River Weed.
ceratophyllum Michx. In Conn. river, E. Hitchcock; South
 Hadley, Miss L. W. Shattuck.

CRASSULACEAE

- Penthorum* [Gronov.] L. Ditch Stonecrop.
sedoides L.
Sedum [Tourn.] L. Stonecrop. Orpine.
 ACRE L. Mossy Stonecrop. Occasional.
ternatum Michx. Sunderland.
reflexum L. Roadside, Leverett, H. G. Jesup.
 PURPUREUM Tausch. Garden Orpine. Live-for-ever. Roadsides.
Sempervivum L. Houseleek.
tectorum L.

SAXIFRAGACEAE

- Saxifraga* [Tourn.] L. Saxifrage.
pennsylvanica L. Swamp Saxifrage.
virginiensis Michx. Early Saxifrage.
Tiarella L. False Miterwort.
cordifolia L.
Mitella [Tourn.] L. Miterwort. Bishop's Cap.
diphylla L.
nuda L. East Amherst, H. G. Jesup; Plumtrees Swamp, C. S.
 Putnam.
Chrysosplenium [Tourn.] L. Golden Saxifrage.
americanum Schwein.
Parnassia [Tourn.] L. Grass of Parnassus.
caroliniana Michx.

Ribes L. Currant. Gooseberry.

Cynosbati L. Prickly Gooseberry. Dogberry. Conway, Mt. Tom, South Hadley.

rotundifolium Michx. West River Mt., E. Hitchcock.

oxyacanthoides L. Smooth Gooseberry.

floridum L'Her. Wild Black Currant.

prostratum L'Her. Skunk Currant. Belchertown, H. G. Jesup.

VULGARE Lam. Red Currant. Escaped from gardens.

aureum Pursh. Missouri or Buffalo Currant. Escaped from cultivation.

HAMAMELIDACEAE

Hamamelis L. Witch Hazel.

virginiana L.

PLATANACEAE

Platanus [Tourn.] L. Sycamore. Buttonwood.

occidentalis L. River valleys. A noteworthy specimen of this tree, 20 feet in circumference, stands on Sunderland street. This is said to be the largest sycamore tree in Massachusetts.

ROSACEAE

Spiraea [Tourn.] L.

latifolia Borkhr. Meadow-sweet.

tomentosa L. Hardhack. Steeple Bush.

Sorbaria A. Br.

sorbifolia (L.) A. Br. Amherst, N. Hadley road, W. D. Barlow.

Pyrus [Tourn.] L.

MALUS L. Apple. Frequently spontaneous.

arbutifolia (L.) L. f. Chokeberry.

arbutifolia (L.) L. f. var. *atropurpurea* (Britton) Robinson.

melanocarpa (Michx.) Willd. Northampton.

americana (Marsh.) DC. American Mountain Ash.

AUCUPARIA (L.) Ehrh. European Mountain Ash. Rowan Tree. Amherst, etc. Escaped.

Amelanchier Medic. Shad Bush.

sanguinea (Pursh.) DC. Millers Falls, Montague; K. M. Wiegand in *Rhodora*, Vol. XIV, p. 138.

stolonifera Wiegand. Millers Falls, Montague; *Rhodora*, Vol. XIV, p. 144.

- A. canadensis* (L.) Medic. *Rhodora*, Vol. XIV, p. 159.
laevis Wiegand. Millers Falls, Montague. *Rhodora*, Vol. XIV, p. 154.
oblongifolia (T. & G.) Roem. The extensive revision of this genus makes it doubtful if this species is in our range.
- Crataegus* L. Hawthorne. This genus has been extensively revised by Prof. C. S. Sargent in the last few years, and our region has not been thoroughly explored. Doubtless many other species exist here. Prof. Sargent has already enumerated some 60 species found in this state. The specific distinctions are so fine that none but a specialist can identify them.
- CRUS-GALLI L.
punctata Jacq.
Gravesii Sarg. Amherst; *Rhodora*, Vol. V, p. 159.
coccinea L.
Stonei Sarg. Smith Hill, Pelham, etc.; *Rhodora*, Vol. V, p. 62.
tomentosa L.
rotundifolia Muench.
macrosperma Ashe. Springfield, L. Andrews.
polita Sarg. Springfield, L. Andrews.
macracantha Lodd.
- Fragaria* [Tourn.] L. Strawberry.
virginiana Duchesne.
vesca L. var. *americana* Porter. Mt. Holyoke, Mt. Toby, etc.
- Waldsteinia* Willd.
fragarioides (Michx.) Trattinick. Barren Strawberry. Apparently rare. See E. F. Williams in *Rhodora*, Vol. XII, p. 170.
- Potentilla* L. Cinquefoil. Five-finger.
arguta Pursh.
monspeliensis L. var. *novegica* (L.) Rydb.
argentea L. Silvery Cinquefoil.
- RECTA L. Belchertown, R. E. Torrey; South Amherst, S. C. Brooks; Springfield, Dr. W. H. Chapin.
palustris (L.) Scop. Marsh Cinquefoil. Springfield, S. Stebbins.
fruticosa L. Shrubby Cinquefoil. More common in the Berkshires, where it becomes a noxious weed.
tridentata Ait. Three-toothed Cinquefoil. Hoosac Mountain, E. Hitchcock. Probably within our range.
pumila Poir. Springfield, L. Andrews.
canadensis L.
canadensis L. var. *simplex* (Michx.) T. & G. Springfield, L. Andrews.

Geum L. Avens.

canadense Jacq.

flavum (Porter) Bicknell. Herb. Spfld Sci. Museum.

virginianum L.

strictum Ait.

rivale L. Water or Purple Avens.

Rubus [Tourn.] L. Bramble.

idaeus L. var. *aculeatissimus* [C. A. Mey.] Regel & Tiling. Wild Red Raspberry. This common raspberry should be called *Rubus idaeus* L. var. *canadensis* Rich. (See W. H. Blanchard in *Rhodora*, Vol. XI, p. 236.)

occidentalis L. Black Raspberry. Thimbleberry.

odoratus L. Purple Flowering Raspberry.

triflorus Richards. Dwarf Raspberry. This plant should be called *Rubus pubescens* Raf. (See W. H. Blanchard in *Rhodora*, Vol. XI, p. 236.)

alleghehiensis Porter. Springfield, L. Andrews.

frondosus Bigel. Springfield, A. Andrews.

Randii (Bailey) Rydb. Springfield, L. Andrews.

canadensis L.

Millspaughii Britton. Common in highlands of New England. Ezra Brainerd in *Rhodora*, Vol. II, p. 26. Collected at Hawley, elevation about 1800 ft.

Andrewsianus Blanchard. Southwick. In *Rhodora*, Vol. VIII, p. 17.

nigricans Rydb. Herb. Spfld Sci. Museum.

hispidus L.

villosus Ait. Dewberry.

villosus Ait. var. *humifusus* T. & G. Herb. Spfld Sci. Museum.

plicatifolius Blanchard. Palmer and Munson. In *Rhodora*, Vol. VIII, p. 216.

Rossbergianus Blanchard. Palmer. Blanchard in *Rhodora*, Vol. IX, p. 7.

Dalibarda Kalm.

repens L. Greenfield, E. Tuckerman; Sunderland, Lake Wyola, R. E. Torrey; Warwick, Dr. N. A. Cobb.

Agrimonia [Tourn.] L. Agrimony.

gryposepala Wallr.

striata Michx. Herb. Spfld Sci. Museum.

mollis (T. & G.) Britton. Herb. Spfld Sci. Museum.

Sanguisorba [Rupp.] L. Burnet.

canadensis L. Canadian Burnet. Hadley, Sunderland, Amherst, Deerfield, etc.

- Rosa* [Tourn.] L. Rose.
blanda Ait. Mt. Holyoke.
 CINNAMOMEA L. Cinnamon Rose. Persistent about dwellings.
 RUBIGINOSA L. Sweetbrier. Eglantine.
 GALLICA L. Garden Rose. Roadsides and fields.
nitida Willd. Springfield, L. Andrews.
carolina L.
virginiana Mill.
humilis Marsh. Plumtrees Swamp, A. V. Osmun ; Springfield,
 L. Andrews.
multiflora Thunb. Escaping locally.
Prunus [Tourn.] L. Plum, Cherry, etc.
serotina Ehrh. Wild Black or Rum Cherry.
virginiana L. Choke Cherry.
pennsylvanica L. f. Wild Red, Bird, Fire or Pin Cherry.
institia C. Bullace Plum. Herb. Spfld Sci. Museum.
cuneata Raf. Springfield, L. Andrews.
pumila L. Sand Cherry.
americana Marsh. Wild Plum.

LEGUMINOSAE

- Gleditsia* L. Honey Locust.
 TRIACANTHOS L. Honey Locust. Escaped from cultivation.
Cassia [Tourn.] L. Senna.
marilandica L. Wild Senna.
nictitans L. Wild Sensitive Plant.
Baptisia Vent. False Indigo.
tinctoria (L.) R. Br. Wild Indigo.
Crotaria (Dill.) L. Rattle-box.
sagittalis L.
Lupinus [Tourn.] L. Lupine.
perennis L.
Trifolium [Tourn.] L. Clover. Trefoil.
 ARVENSE L. Rabbit-foot. Stone Clover.
incarnatum L. Crimson or Italian Clover. Amherst. Occa-
 sionally persists.
 PRATENSE L. Red Clover.
 REPENS L. White Clover.
 HYBRIDUM L. Alsike Clover. Common under cultivation and in
 fields.
 AGRARIUM L. Yellow or Hop Clover.
 PROCUMBENS L. Low Hop Clover.

- Melilotus* [Tourn.] Hill. Melilot. Sweet Clover.
officinalis (L.) Lam. Yellow Melilotus.
 ALBA Desr. White Melilot.
- Medicago* [Tourn.] L. Medick.
 SATIVA L. Lucerne. Alfalfa.
 LUPULINA L. Black Medick. Nonesuch. Both species of *Medicago* were formerly rare, but now more common.
- Lotus* [Tourn.] L. Bird's Foot Trefoil.
corniculatus L. North Amherst, A. V. Osmun.
- Amorpha* L.
 FRUTICOSA L. False Indigo. Escaped from cultivation and established near Mass. Agr. College grounds, Amherst; Springfield, L. Andrews.
- Tephrosia* Pers. Hoary Pea.
virginiana (L.) Pers. Goat's Rue. Catgut.
- Robinia* L. Locust.
 PSEUDO-ACACIA L. Common Locust or False Acacia. Wellesley.
 VISCOSA Vent. Clammy Locust. Persistent and spreading.
- Coronilla* L.
 VARIA L. Amherst, etc.
- Desmodium* Desv. Tick Trefoil.
nudiflorum (L.) DC.
grandiflorum (Walt.) DC.
rotundifolium (Michx.) DC.
canescens (L.) DC.
bracteosum (Michx.) DC.
Dillenii Darl. ingt.
paniculatum (L.) DC.
canadense (L.) DC.
rigidum (Ell.) DC.
marilandicum (L.) DC.
- Lespedeza* Michx. Bush Clover.
procumbens Michx.
violacea (L.) Pers.
hirta (L.) Hornem.
capitata Michx.
capitata Michx. var. *velutina* (Bicknell) Fernald. Springfield, L. Andrews.
- Vicia* [Tourn.] L. Vetch. Tare.
 SATIVA L. Spring Vetch.
 ANGUSTIFOLIA (L.) Reichard. var. *segetalis* (Thuillier) Koch. Amherst; Springfield, L. Andrews.

Cracca L. Deerfield; Springfield, L. Andrews; Sunderland, H. G. Jesup; Monson, E. L. Morris; Lock's pond, Shutesbury, R. E. Torrey. More or less common now; previously rare. Probably native.

Lathyrus [Tourn.] L. Vetchling. Everlasting Pea.

LATIFOLIUS L. Everlasting or Perennial Pea. Amherst, etc.

PRATENSIS L. West Springfield, A. P. Foster; Springfield, Mrs. M. L. Owen.

Apios (Boerhaave) Ludwig. Groundnut. Wild Bean.
tuberosa Muench.

Amphicarpa Ell. Hog Peanut.

monoica (L.) Ell.

Pitcheri T. & G. Sunderland, R. E. Torrey.

LINACEAE

Linum [Tourn.] L. Flax.

usitatissimum L. Dumps and railroad embankments.

virginianum L.

OXALIDACEAE

Oxalis L. Wood Sorrel.

Acetosella L. Common Wood Sorrel. Amherst, Conway, etc.

violacea L. Violet Wood Sorrel. Notch, Mt. Holyoke, etc.

stricta L.

corniculata L. Lady's Sorrel.

repens Thunb. About greenhouses, etc.

GERANIACEAE

Geranium [Tourn.] L. Cranesbill.

maculatum L. Wild Cranesbill.

Robertianum L. Herb Robert.

carolinianum L.

pusillum Burm. f. In grass lands. Springfield, Mrs. M. L. Owen.

molle L. In grass lands. Springfield, Mrs. M. L. Owen.

RUTACEAE

Zanthoxylum L. Prickly Ash.

americanum Mill. Northern Prickly Ash. Toothache-tree. Sunderland, E. Hitchcock; Norwottuck, W. S. Clark.

Ptelea L. Hop Tree.

TRIFOLIATA L. Springfield, L. Andrews; Easthampton, Dr. N. A. Cobb; also seeding in freely where cultivated.

SIMARUBACEAE

Ailanthus Desf. Tree of Heaven.

GLANDULOSA Desf. Established here and there, frequently under the most adverse conditions.

POLYGALACEAE

Polygala [Tourn.] L. Milkwort.

paucifolia Willd. Fringed Polygala. Flowering Wintergreen.

polygama Walt.

sanguinea L.

verticillata L.

verticillata L. var. *ambigua* (Nutt.) Wood. Springfield, Mrs. A. J. Smith.

EUPHORBIACEAE

Acalypha L. Three-seeded Mercury.

virginica L.

Euphorbia L. Spurge.

Preslii Guss.

hirsuta (Torr.) Wiegand. Springfield, L. Andrews.

maculata L. Milk Purslane.

Ipecacuanhae L. Enfield ; A. S. Pease in *Rhodora*, Vol. VI, p. 87.

CYPARISSIAS L. Cypress Spurge. Fruiting forms found in Greenfield ; Walter Dean in *Rhodora*, Vol. XIV, page 194.

CALLITRICHACEAE

Callitriche L. Water Starwort.

palustris L.

heterophylla Pursh. Near Mt. Warner ; H. L. Clark in *Rhodora*, Vol. I, p. 164 ; Springfield, L. Andrews.

ANACARDIACEAE

Rhus L. Sumac.

typhina L. Staghorn Sumac.

glabra L. Smooth Sumac.

copallina L. Dwarf Sumac.

Vernix L. Poison Sumac or Dogwood.

Toxicodendron L. Poison Ivy. Poison Oak.

AQUIFOLIACEAE

Ilex L.*verticillata* (L.) Gray. Black Alder. Winterberry.*laevigata* (Pursh.) Gray. Smooth Winterberry. Belchertown ponds, H. G. Jesup; Southwick; C. H. Bissell in *Rhodora*, Vol. XIII, p. 54.*Nemopanthus* Raf. Mountain Holly.*mucronata* (L.) Trel.

CELASTRACEAE

Celastrus L. Staff Tree. Shrubby Bitter-sweet.*scandens* L. Waxwork. Climbing Bitter-sweet.

STAPHYLEACEAE

Staphylea L. Bladder Nut.*trifolia* L. American Bladder Nut. Sunderland, brooks of Conn. river, C. S. Plumb; Mt. Toby, A. V. Osmun; Plumtrees, Sunderland, Mt. Holyoke, Deerfield, North Hadley.

ACERACEAE

Acer [Tourn.] L. Maple.*pennsylvanicum* L. Striped Maple. Moosewood.*spicatum* Lam. Mountain Maple.*saccharum* Marsh. Sugar or Rock Maple.*saccharum* Marsh. var. *nigrum* (Michx. f.) Britton. Black Sugar Maple. Many of our sugar maples in the Connecticut valley, if not identical with this variety, closely approach it in form, texture, color and pubescence of leaf and general habit.*saccharinum* L. White or Silver Maple.*rubrum* L. Red or Swamp Maple.*rubrum* L. var. *tridens* Wood. Springfield, L. Andrews.*Negundo* L. Box Elder. Western part of our range.

SAPINDACEAE

Aesculus L. Horse-chestnut.

HIPPOCASTANUM L. Common Horse-chestnut. Occasionally propagates by seeds.

BALSAMINACEAE

- Impatiens* (Rivinius) L. Balsam. Jewelweed.
pallida Nutt. Pale Touch-me-not.
biflora Walt. Spotted Touch-me-not.

RHAMNACEAE

- Rhamnus* [Tourn.] L. Buckthorn.
alnifolia L'Her. Deerfield, E. Hitchcock. Has not been found
 by other collectors.
 CATHARTICA L. Common Buckthorn.
Ceanothus L. Red-root.
americanus L. New Jersey Tea.
ovatus Desf. Springfield, W. E. Johnson.

VITACEAE

- Pseodera* Neck. Virginia Creeper. Woodbine.
quinquefolia (L.) Greene.
quinquefolia (L.) Greene. var. *hirsuta* (Donn) Rehder. Amherst;
 A. Rehder in *Rhodora*, Vol. X, p. 26.
Ampelopsis
heterophylla Sieb. & Zucc. Escaping; Mass. Agr. College
 grounds. (See Bailey's *Cyc. of Am. Hort.*, Vol. I,
 p. 59.
Vitis [Tourn.] L. Grape.
labrusca L. Northern Fox Grape.
aestivalis Michx. Summer or Pigeon Grape.
cordifolia Michx. Frost or Chicken Grape.
vilpina L. River-bank or Frost Grape.

TILIACEAE

- Tilia* [Tourn.] L. Linden.
americana L. Basswood.

MALVACEAE

- Abutilon* [Tourn.] Mill. Indian Mallow.
Theophrasti Medic. Velvet Leaf.
Malva [Tourn.] L. Mallow.
 ROTUNDIFOLIA L. Common Mallow, Cheeses.
 SYLVESTRIS L. High Mallow.
 MOSCHATA L. Musk Mallow.
Hibiscus L. Rose Mallow.
 TRIONUM L. Flower-of-an-hour. Springfield, L. Andrews.

HYPERICACEAE

- Hypericum* [Tourn.] L. St. John's-wort.
Ascyron L. Great St. John's-wort.
 PERFORATUM L. Common St. John's-wort.
punctatum Lam.
ellipticum Hook.
mutilum L.
majus (Gray) Britton. Conway, H. G. Jesup; Springfield.
canadense L.
gentianoides (L.) BSP. Orange Grass. Pinweed.
virginicum L. Marsh St. John's-wort.

CISTACEAE

- Helianthemum* [Tourn.] Mill. Rockrose.
canadense (L?) Michx. Frostweed.
Lechea (Kalm) L. Pinweed.
villosa Ell.
minor L.
intermedia Leggett. Springfield, L. Andrews.
maritima Leggett. var. *interior* Robinson. Training School grounds, Springfield, L. Andrews.
tenuifolia Michx. Southwick, S. Stebbins; Amherst, E. F. Bishop.

VIOLACEAE

This genus, *Viola*, has recently been extensively revised and many new species have been added. The tendency to hybridization renders the determination of species difficult.

- Viola* [Tourn.] L. Violet. Heart's-ease.
pedata L. Bird-foot Violet.
pedata L. var. *lineariloba* DC. Springfield, L. Andrews.
cucullata Ait.
latiuscula Greene.
papilionacea Pursh.
palmata L.
triloba Schwein. Springfield, L. Andrews.
sororia Willd.
septentrionalis Greene.
fimbriatula Sm.
sagittata Ait.
Selkirkii Pursh.
lanceolata L. Lance-leaved Violet.
primulifolia L. Primrose-leaved Violet.

- pallens* (Banks) Brainerd.
blanda Willd. Notch, Mt. Holyoke, and Mt. Toby.
renifolia Gray.
rotundifolia Michx. Round-leaved or Early Yellow Violet.
pubescens Ait. Downy Yellow Violet.
scabriuscula Schwein.
canadensis L. Canada Violet.
striata Ait. Amherst, E. Hitchcock; South Hadley, Mrs. C. S. Phelps.
conspersa Reichenb.
rostrata Pursh. Long-spurred Violet. Whately Glen and Rattlesnake Gutter.
 TRICOLOR L. Pansy. Heart's-ease.
 ARVENSIS Murr. Wild Pansy.

THYMELAEACEAE

- Dirca* L. Leatherwood. Moosewood.
palustris L. Wicopy.

ELAEAGNACEAE

- Elaeagnus* [Tourn.] L.
umbellata Thunbg. Escaping freely on Mass. Agr. College grounds. See Bailey's *Cyc. of Am. Hort.*, Vol. II, p. 524.

LYTHRACEAE

- Ammannia* [Houston] L.
 KOEHNEI Britton. Lombard Reservoir, Springfield, Dr. W. H. Chapin.
Decodon J. F. Gmel. Swamp Loosestrife.
virticillatus (L.) Ell. Water Willow. Belchertown, Sunderland, Springfield, etc.
Lythrum L. Loosestrife.
alatum Pursh. Sunderland, R. E. Torrey; Springfield, L. Andrews.
 SALICARIA L. Spiked Loosestrife. Wet places.
 VIRGATUM L.

MELASTOMACEAE

- Rhexia* L. Deer Grass. Meadow Beauty.
virginica L. Leverett, Shutesbury, H. G. Jesup; Warwick, C. S. Plumb; Sunderland, A. V. Osmun. Rather rare, but abundant locally.

ONAGRACEAE

Ludvigia L. False Loosestrife.

alternifolia L. Seedbox. Hadley, E. Tuckerman ; Springfield,
Mrs. M. L. Owen.

polycarpa Short and Peter. East Longmeadow, Dr. W. H.
Chapin.

palustris (L.) Ell. Water Purslane.

Epilobium L. Willow-herb.

angustifolium L. Great Willow-herb. Fire-weed.

molle Torr. Sunderland, Amherst.

densum Raf.

coloratum Muhl.

adenocaulon Haussk.

Oenothera L. Evening Primrose.

cruciata Nutt. Sunderland, Northampton, etc., S. C. Brooks.

muricata L. Amherst, S. C. Brooks.

biennis L. Common Evening Primrose.

grandiflora Ait. Pansy Park, Belchertown, L. W. Goodell;
Springfield. Escaped from cultivation.

pumila L.

fruticosa L. Sundrops. South Hadley, Mrs. C. S. Phelps.

Circaea [Tourn.] L. Enchanter's Nightshade.

lutetiana L.

alpina L.

HALORAGIDACEAE

Myriophyllum [Vaill.] L. Water Milfoil.

verticillatum L.

humile (Raf.) Morong. Hadley, H. G. Jesup ; Springfield, L.
Andrews.

humile (Raf.) Morong. forma *capillaceum* (Torr.) Fernald. Herb.
Spfld Sci. Museum.

tenellum Bigel.

Proserpinaca L. Mermaid-weed.

palustris L.

ARALIACEAE

Aralia [Tourn.] L.

racemosa L. Spikenard.

hispida Vent. Bristly Sarsaparilla. Wild Elder.

nudicaulis L. Wild Sarsaparilla.

Panax L. Ginseng.

quinquefolium L. Ginseng. Deerfield, Conway, Mt. Toby, Amherst, etc. The ginseng of commerce, collected and cultivated for its medicinal roots.

trifolium L. Dwarf Ginseng. Ground-nut.

UMBELLIFERAE

Sanicula [Tourn.] L. Sanicle. Black Snakeroot.

marilandica L.

gregaria Bicknell. Springfield, L. Andrews.

canadensis L.

Hydrocotyle [Tourn.] L. Water Pennywort.

americana L.

Osmorhiza Raf. Sweet Cicely.

Claytoni (Michx.) Clarke.

longistylis (Torr.) DC.

Conium L. Poison Hemlock.

MACULATUM L. A poisonous plant.

Cicuta L. Water Hemlock.

maculata L. Spotted Cowbane. Musquash Root. Beaver Poison.

bulbifera L.

Carum L. Caraway.

CARVI L. Caraway. Around old dwellings.

Berula Hoffm.

erecta (Huds.) Coville.

Sium [Tourn.] L. Water Parsnip.

cicutaeifolium Shrank.

Cryptotaenia DC. Honewort.

canadensis (L.) DC.

Zizia Koch.

aurea (L.) Koch. Golden Alexanders.

Taenidia Drude.

integerrima (L.) Drude. Montague, J. L. Bennett; Dr. N. A. Cobb's List.

Thaspium Nutt. Meadow Parsnip.

aureum Nutt.

Pastinaca L. Parsnip.

SATIVA L.

Anethum [Tourn.] L. Dill.

graveolens L. Feeding Hills, Springfield. Herb. Spfld Sci. Museum.

Heracleum L. Cow Parsnip.

lanatum Michx.

Angelica L. Angelica
atropurpurea L.

Daucus [Tourn.] L. Carrot.

CAROTA L. One of our worst biennial weeds.

CORNACEAE

Cornus [Tourn.] L. Cornel. Dogwood.

canadensis L. Dwarf Cornel. Bunchberry.

florida L. Flowering Dogwood.

circinata L'Her. Round-leaved Cornel or Dogwood. A beautiful species found largely in rich humus of mountainous regions.

Amomum Mill. Silky Cornel. Kinnikinnik.

stolonifera Michx. Red-ozier Dogwood.

paniculata L'Her.

alternifolia L. f.

Nyssa L. Tupelo. Pepperidge. Sour Gum.

sylvatica Marsh. Black Gum. Generally distributed, but not well known.

ERICACEAE

Clethra [Gronov.] L. White Alder.

alnifolia L. Sweet Pepperbush. Belchertown swamp, R. E. Torrey. This is the most western station known to us in Mass. Common near the coast. A valuable honey plant.

Chimaphila Pursh. Pipsissewa.

umbellata (L.) Nutt. Prince's Pine. Pipsissewa.

maculata (L.) Pursh. Spotted Wintergreen. Less common than the preceding.

Moneses Salisb. One-flowered Pyrola.

uniflora (L.) Gray. Williamsburg, H. G. Jesup; Mt. Toby, H. L. Clark in *Rhodora*, Vol. I, p. 165; North Leverett, R. E. Torrey; Amherst.

Pyrola [Tourn.] L. Wintergreen. Shin Leaf.

secunda L.

chlorantha Sw.

elliptica Nutt. Shin Leaf.

americana Sweet.

asarifolia Michx.

Monotropa L. Pinesap.

uniflora L. Indian Pipe. Corpse Plant.

Hypopitys L. Pinesap. Fake Beech Drops.

Pterospora Nutt. Pine Drops.

andromeda Nutt. Easthampton, E. Hitchcock. Not observed by other collectors.

Ledum L. Labrador Tea.

groenlandicum Oeder. Amherst, Hitchcock Catal.; Greenfield, Plumtrees Road; Springfield, Miss F. A. Stebbins.

Rhododendron L.

viscosum (L.) Torr. Clammy Azalea. White Swamp Honeysuckle. Belchertown, etc. Rather rare and local. More common near the coast.

viscosum (L.) Torr. var. *glaucum* (Michx.) Gray. Springfield, L. Andrews.

nudiflorum (L.) Torr. Purple Azalea. Pinxter Flower.

canescens (Michx.) G. Don. This species seems to be more common than the preceding in the Conn. Valley. According to our observations a mark of distinction between the two is the simultaneous appearance of flowers and leaves in *R. canescens*.

canadense (L.) BSP. Rhodora.

Kalmia L. Laurel.

latifolia L. Mountain Laurel. Spoon-wood.

latifolia L. forma *polypetala* Nicholson. [See Alfred Rehder in *Rhodora*, Vol. XII, p. 1.] This interesting form of *Kalmia* was discovered by Miss M. Bryant at South Deerfield, and described by Asa Gray in the *Am. Nat.*, Vol. IV, p. 373; 1871. In this form the corolla is completely divided into linear or liliform divisions. One of these forms is in the Arnold Arboretum, and Prof. C. S. Sargent has figured and described it in *Garden and Forest*, Vol. II, pp. 452-453. The writer discovered a similar form in Leverett near a roadside, in 1907. (See *Rhodora*, Vol. II, p. 199.) And in June, 1910, a large clump of the same was discovered at Mt. Toby.

angustifolia L. Sheep Laurel. Lambkill. Wicky.

polifolia Wang. Pale Laurel. Springfield, Dr. W. H. Chapin. Rare. Amherst.

Andromeda L.

glaucophylla Link. Bog Rosemary. Belchertown south pond, Hampton pond; Springfield, S. Stebbins and Dr. W. H. Chapin; Florence. See *Rhodora*, Vol. V, pp. 67-71.

Lyonia Nutt.*ligustrina* (L.) DC. Male Berry.*Chamaedaphne* Muench. Leather Leaf. Cassandra.*calyculata* (L.) Muench.*Epigaea* L. Ground Laurel. Trailing Arbutus.*repens* L. Mayflower.*Gaultheria* [Kalm] L. Aromatic Wintergreen.*procumbens* L. Teaberry. Checkerberry.*Arctostaphylos* Adans. Bearberry.*Uva-ursi* (L.) Spreng. Not common.*Calluna* Salisb. Heather. Ling.*vulgaris* (L.) Hull. Northfield, C. C. Frost. Probably an escape.*Chiogenes* Salisb. Creeping Snowberry.*hispidula* (L.) T. & G. Moxie Plum. Capillaire. Swamps, Springfield, Amherst, etc. Local.*Gaylussacia* HBK. Huckleberry.*frondosa* (L.) T. & G. Blue Tangle. Dangleberry.*baccata* (Wang.) C. Koch. Black Huckleberry.*Vaccinium* L. Blueberry. Cranberry.*stamineum* L. Deerberry. Squaw Huckleberry.*pennsylvanicum* Lam. Low Sweet Blueberry. Early Sweet Blueberry.*pennsylvanicum* Lam. forma *leucocarpum* Deane. The common blueberry runs into many forms, varying in color and translucency of the fruit. Forma *leucocarpum* with white fruit is most pronounced.*pennsylvanicum* Lam. var. *nigrum* Wood. Low Black Blueberry.*vacillans* Kalm. Late Low Blueberry.*corymbosum* L. High Blueberry.*atrococcum* (Gray) Heller. Black High Blueberry.*Oxycoccus* L. Small Cranberry.*macrocarpon* Ait. Large or American Cranberry.

PRIMULACEAE

Lysimachia [Tourn.] L. Loosestrife.*punctata* L. Roadsides, South Amherst, H. G. Jesup. Not found at this station now. See *Rhodora*, Vol. IV, p. 62.*quadrifolia* L.*terrestris* (L.) BSP.

NUMMULARIA L. Moneywort. Common.

thyrsiflora L. Tufted Loosestrife.*Steironema* Raf.*ciliatum* (L.) Raf.

Trientalis L. Chickweed. Wintergreen.

americana (Pers.) Pursh. Star Flower. This plant should be called *Trientalis borealis* Raf. See W. H. Blanchard in *Rhodora*, Vol. XI, p. 236.

OLEACEAE

Fraxinus [Tourn.] L. Ash.

americana L. White Ash. Our most common ash; the others more or less rare.

pennsylvanica Marsh. Red Ash.

pennsylvanica Marsh. var. *lanceolata* (Borkh.) Sarg. Green Ash.

nigra Marsh. Black Ash.

Ligustrum [Tourn.] L. Privet.

VULGARE L. Privet or Prim. Much more common near the coast.

GENTIANACEAE

Gentiana [Tourn.] L. Gentian.

crinita Froel. Fringed Gentian.

quinquefolia L. Mt. Toby, H. G. Jesup; Hoosac Mountain (probably within our range), E. Hitchcock; Blandford, Mrs. S. T. Seelye; Cobb's List.

Andrewsii Griseb. Closed Gentian.

linearis Froel. Hoosac Mts. (within our range), S. C. Brooks.

Halenia Borkh. Spurred Gentian.

deflexa (Sm.) Grisebach. Cummington, H. G. Jesup.

Bartonia Muhl.

virginica (L.) BSP.

Menyanthes [Tourn.] L. Buckbean.

trifoliata L.

Nymphoides [Tourn.] Hill. Floating Heart.

lacunosum (Vent.) Fernald. Ponds, South Hadley, Belchertown, etc., S. C. Brooks.

APOCYNACEAE

Apocynum [Tourn.] L. Dogbane. Indian Hemp.

androsaemifolium L. Spreading Dogbane.

medium Greene. Springfield, L. Andrews.

cannabinum L. Indian Hemp.

ASCLEPIADACEAE

- Asclepias* [Tourn.] L. Milkweed. Silkweed.
tuberosa L. Butterfly-weed. Pleurisy-root.
purpurascens L. Purple Milkweed.
incarnata L. Swamp Milkweed.
incarnata L. var. *pulchra* (Ehrh.) Pers. Springfield, L. Andrews.
cannabinum L. Indian Hemp.
syriaca L. Common Milkweed or Silkweed.
amplexicaulis Sm.
phytolaccoides Pursh. Poke Milkweed.
quadrifolia Jacq.
verticillata L.

CONVOLVULACEAE

- Ipomoea* L. Morning Glory.
purpurea (L.) Roth.
Convolvulus [Tourn.] L. Bindweed.
spithameus L.
 JAPONICUS Thunb. Escaped from cultivation.
sepium L. Hedge Bindweed.
Cuscuta [Tourn.] L. Dodder.
Epithymum Murr. Occasionally found parasitic on clover and alfalfa, causing "lodging" of the host plant. Introduced in clover seed, but not persisting.
arvensis Beyrich. Occasionally affecting alfalfa and clover.
Gronovii Willd. Common on alders, etc., but observed growing on raspberry bushes.

POLEMONIACEAE

- Phlox* L.
paniculata L. Persistent and occasionally escaped.
stolonifera Sims. Amherst, E. N. Brown.

HYDROPHYLLACEAE

- Hydrophyllum* [Tourn.] L. Waterleaf.
virginianum L. Rare.

BORAGINACEAE

Cynoglossum [Tourn.] L. Hound's Tongue.

OFFICINALE L. Common Hound's Tongue.

boreale Fernald. Mt. Toby, A. V. Osmun.

Lappula [Rivinius] Muench. Stickseed.

virginiana (L.) Greene. Beggar's Lice. Springfield, L. Andrews ;
Amherst.

Symphytum [Tourn.] L. Comfrey.

OFFICINALE L. Common Comfrey. Waste places ; Belchertown,
Leverett, etc.

Lycopsis L. Bugloss.

arvensis L. Small Bugloss. Amherst and Hatfield, E. Hitchcock.

Myosotis (Rupp.) L. Scorpion-grass. Forget-me-not.

SCORPIOIDES L. True Forget-me-not. Amherst, etc.

arvensis (L.) Hill. Hitchcock Catal.

virginica (L.) BSP. Amherst, Mt. Holyoke, etc., H. G. Jesup.

Lithospermum [Tourn.] L. Gromwell. Puccoon.

ARVENSE L. Corn Gromwell. Longmeadow ; Springfield, L.
Andrews.

Onosmodium Michx. False Gromwell.

virginianum (L.) DC. Monson, E. Hitchcock ; Long Hill, Springfield, Mrs. Burnham.

Echium [Tourn.] L. Viper's Bugloss.

VULGARE L. Blue-weed. Blue Devil. Roadsides near Greenfield, F. G. Tuckerman ; Springfield, Dr. George Demock ; Conway, H. G. Jesup.

VERBENACEAE

Verbena [Tourn.] L. Vervain.

urticaefolia L. White Vervain.

angustifolia Michx. South Hadley, E. Hitchcock ; Amherst, W. S. Clark ; Mt. Tom, S. Stebbins ; Mt. Holyoke, H. G. Jesup.

hastata L. Blue Vervain.

LABIATAE

Teucrium [Tourn.] L. Germander.

canadense L. American Germander. Wood Sage.

Trichostema L. Blue Curls.

dichotomum L. Bastard Pennyroyal.

Scutellaria L. Skullcap.

lateriflora L. Mad-dog Skullcap. A form with white flowers has been found at Sunderland by R. E. Torrey.

galericulata L.

Marrubium [Tourn.] L. Horehound.

VULGARE L. Common Horehound.

Agastache Clayt. Giant Hyssop.

nepetoides (L.) Ktze. Deerfield, E. Hitchcock. Not since collected.

Nepeta L. Cat Mint.

CATARIA L. Catnip.

hederacea (L.) Trevisan. Ground Ivy. Gill-over-the-Ground.

Prunella L. Self-heal.

vulgaris L. Heal-all. Carpenter-weed.

Galeopsis L. Hemp. Nettle.

TETRAHIT L. Common Hemp. Nettle.

Lamium L. Dead Nettle.

AMPLEXICAULE L. Henbit.

PURPUREUM L.

Leonurus L. Motherwort.

CARDIACA L. Common Motherwort.

Stachys [Tourn.] L. Hedge Nettle.

TENUIFOLIA Willd. var. ASPERA (Michx.) Fernald.

Monarda L. Horse Mint.

DIDYMA L. Oswego Tea. Bee Balm. Roadsides, Leverett, etc.

FISTULOSA L. Wild Bergamot. Shelburne, F. G. Tuckerman; Mt. Toby, A. V. Osmun. Prof. Osmun observed a large colony of the species on Mt. Toby quite remote from any habitation, which had all the appearance of being indigenous. Prof. Tuckerman apparently considered it indigenous, although M. L. Fernald (*Rhodora*, Vol. III, p. 15) describes it as an escape in New England.

Blephilia Raf.

ciliata (L.) Raf. Hadley, H. G. Jesup.

hirsuta (Pursh) Benth. Wood Mint. Cummington, etc., E. Hitchcock.

Hedeoma Pers. Mock Pennyroyal.

pulegioides (L.) Pers. American Pennyroyal.

Melissa [Tourn.] L. Balm.

officinalis L. Common Balm. Escaped from gardens, Conway, H. G. Jesup.

Satureja [Tourn.] L. Savory. Calamint.

vulgaris (L.) Fritsch. Basil. Apparently native.

- Origanum* [Tourn.] L. Wild Marjoram.
 VULGARE L. Roadsides, Amherst, etc.
- Pycnanthemum* Michx. Mountain Mint. Basil.
flexuosum (Walt.) BSP.
virginianum (L.) Durand & Jackson.
incanum (L.) Michx. Mt. Holyoke, etc., H. G. Jesup.
muticum (Michx) Pers.
- Thymus* [Tourn.] L.
 SERPYLLUM L. Creeping Thyme. Amherst, etc., W. D. Barlow ; Springfield, Dr. W. H. Chapin. Spreading.
- Lycopus* [Tourn.] L. Water Horehound.
virginicus L. Bugle Weed.
uniflorus Michx. Bugle Weed. Springfield, L. Andrews.
americanus Muhl.
- Mentha* [Tourn.] L. Mint.
 SPICATA L. Spearmint.
piperita L. Peppermint.
arvensis L. var. *canadensis* (L.) Briquet.
arvensis L. var. *glabrata* (Benth.) Fernald. Sunderland, R. E. Torrey.
- Collinsonia* L. Horse Balm.
canadensis L. Rich-weed. Stone-root.

SOLANACEAE

- Solanum* [Tourn.] L. Nightshade.
 DULCAMARA L. Bitter-sweet.
nigrum L. Common Nightshade.
carolinense L. Horse Nettle. Training School grounds, Springfield.
- Physalis* L. Ground Cherry.
 PRUINOSA L. Strawberry Tomato. Persistent and escaping.
heterophylla Nees. Springfield, L. Andrews ; Amherst.
virginiana Mill. Springfield, Amherst, etc.
- Nicandra* Adans. Apple of Peru.
 PHYSALODES (L.) Pers.
- Lycium* L. Matrimony Vine.
halimifolium Mill. Sometimes escaped.
- Hyoscyamus* [Tourn.] L. Henbane.
 NIGER L. Black Henbane.
- Datura* L. Jamestown Weed or Jimson Weed. Thorn Apple.
 STRAMONIUM L. Stramonium.
 TATULA L. Purple Thorn Apple.

SCROPHULARIACEAE

- Verbascum* [Tourn.] L. Mullein.
 THAPSUS L. Common Mullein.
 BLATTARIA L. Moth Mullein. Roadsides, etc.
- Linaria* [Tourn.] Hill. Toadflax.
 VULGARIS Hill. Ramsted. Butter and Eggs.
canadensis (L.) Dumont.
- Scrophularia* [Tourn.] L. Figwort.
marilandica L.
leporella Bicknell. Amherst, S. F. Hamblin ; Springfield, L. Andrews.
- Pentstemon* (Mitchell) Ait.
hirsutus (L.) Willd. Springfield, Miss G. L. Pettis ; East Amherst, H. L. Clark in *Rhodora*, Vol. I, p. 164 ; Hadley, Cobb's List.
 LAEVIGATUS Ait. Springfield, Miss G. L. Pettis.
grandiflorus Nutt. Springfield, in waste land on the edge of the city, Dr. W. H. Chapin ; *Rhodora*, Vol. VII, p. 36. Springfield, Miss E. J. Steele and Joel Hendrick.
- Chelone* [Tourn.] L. Turtlehead. Snakehead.
glabra L. Balmony.
- Mimulus* L. Monkey Flower.
ringens L.
alatus Ait. Amherst, E. Hitchcock. Not observed in recent years.
- Ilysanthes* Raf. False Pimpernel.
dubia (L.) Barnhart.
- Gratiola* L. Hedge Hyssop.
virginiana L.
aurea Muhl.
- Veronica* [Tourn.] L. Speedwell.
virginica L. Culver's-root. Culver's Physic.
Anagallis-aquatica L. Water Speedwell.
americana Schwein. American Brooklime.
scutellata L. Marsh Speedwell.
officinalis L. Common Speedwell.
serpyllifolia L. Thyme-leaved Speedwell.
peregrina L. Neckweed. Purslane Speedwell.
 ARVENSIS L. Corn Speedwell.
- Gerardia* (Plumier) L. Gerardia.
pedicularia L.
flava L. Downy False Foxglove.
virginica (L.) BSP. Smooth False Foxglove.

- G. paupercula* (Gray) Britton. Purple Gerardia. Generally distributed, but not common.
tenuifolia Vahl. Slender Gerardia.
Castilleja Mutis. Painted Cup.
coccinea (L.) Spreng. Scarlet Painted Cup. Generally distributed, but not common.
Melampyrum [Tourn.] L. Cow Wheat.
lineare Lam.
Pedicularis [Tourn.] L. Lousewort.
canadensis L. Common Lousewort. Wood Betony.
lanceolata Michx. Prescott, E. F. Bishop, H. G. Jesup; West Springfield, E. Hitchcock. See *Rhodora*, Vol. VII, p. 36.
Schwalbea [Gronov.] L. Chaff-seed.
americana L. Montague, H. G. Jesup. Possibly introduced.

LENTIBULARIACEAE

- Utricularia* L. Bladderwort.
inflata Walt. Belchertown ponds, etc.
vulgaris L. Greater Bladderwort.
minor L. Smaller Bladderwort. Leverett pond, etc.
gibba L. Leverett pond, E. F. Bishop; Springfield, Mrs. M. L. Owen; and elsewhere.
intermedia Hayne. Springfield, S. Stebbins; Leverett, Belchertown, etc.
purpurea Walt. Belchertown, E. F. Bishop; Springfield, Mrs. M. L. Owen; and elsewhere.
resupinata B. D. Greene. Belchertown, E. F. Bishop.
cornuta Michx.

OROBANCHACEAE

- Epifagus* Nutt. Beech-drops. Cancer-root.
virginiana (L.) Bart.
Conopholis Wallr. Squaw-root. Cancer-root.
americana (L. f.) Wallr. Mt. Holyoke, E. Hitchcock; Mt. Tom, S. Stebbins; Mt. Toby, H. L. Clark in *Rhodora*, Vol. I, p. 165.
Orobanche [Tourn.] L. Broom-rape.
uniflora L. One-flowered Cancer-root.

PHRYMACEAE

- Phryma* L. Lopseed.
Leptostachya L.

PLANTAGINACEAE

Plantago [Tourn.] L. Plantain. Ribwort.

major L. Common Plantain. The old Indian name was "White Man's Foot," applied because of its appearance in clearings made by the early settlers. It was formerly considered as an introduced plant, but is now recognized as native to America; it is also cosmopolitan.

Rugelii Dcne. Very common.

LANCEOLATA L. Rib Grass. Ripple Grass. English Plantain. South Amherst, 1829, E. Hitchcock. Then apparently rare; now very common.

MEDIA L. Hoary Plantain. Becoming common.

Purshii R. & S. Springfield, 1879; Amherst, H. L. Clark in *Rhodora*, Vol. I, p. 165. Adventive from the West.

ARISTATA Michx. Near Pratt Field, Amherst, S. C. Brooks; Springfield, L. Andrews.

RUBIACEAE

Asperula L.

galioides Bieb. Northampton, Miss G. L. Pettis.

odorata L. Sweet Woodruff. Northampton, Miss G. L. Pettis.
See Bailey's *Enc. of Am. Hort.*, p. 108.

Galium L. Bedstraw. Cleavers.

Aparine L. Cleavers. Goose Grass. Hitchcock Catal.

VERUM L. Yellow Bedstraw. Springfield, Amherst, etc.

pilosum Ait.

circaezans Michx. Wild Liquorice.

lanceolatum Torr. Wild Liquorice.

boreale L. Northern Bedstraw.

MOLLUGO L.

trifidum L.

Claytoni Michx. Springfield, L. Andrews.

tinctorium L.

asprellum Michx. Rough Bedstraw.

triflorum Michx. Sweet-scented Bedstraw.

Mitchella L. Partridge Berry.

repens L.

Cephalanthus L. Buttonbush.

occidentalis L.

Houstonia L.

caerulea L. Bluets. Innocence.

longifolia Gaertn. Springfield.

CAPRIFOLIACEAE

Diervilla [Tourn.] Mill. Bush Honeysuckle.

Lonicera Mill.

Lonicera L. Honeysuckle.

caerulea L. var. *villosa* (Michx.) T. & G. Mountain Fly Honeysuckle. Springfield, Dr. W. H. Chapin. Mt. Holyoke, Dr. H. E. Hooker.

tatarica L. Tartarian Honeysuckle. Amherst; escaped from cultivation.

canadensis Marsh. American Fly Honeysuckle.

sempervirens L. Trumpet Honeysuckle. Sparingly spontaneous.

dioica L.

Symphoricarpos [Dill.] Ludwig. Snowberry.

racemosus Michx. Snowberry. Amherst. escaped from cultivation.

Linnaea [Gronov.] L. Twin-flower.

borealis L. var. *americana* (Forbes) Rehder.

Triosteum L. Feverwort. Horse Gentian.

perfoliatum L. Tinker's Weed. Wild Coffee.

aurantiacum Bicknell. North Wilbraham; Herb. Spfld Sci. Museum.

Viburnum [Tourn.] L. Arrow-wood. Laurestinus.

alnifolium Marsh. Hobble-bush. Witch Hobble. Moosewood. Confined to rich humus soils.

Opulus L. var. *americanum* (Mill.) Ait. Cranberry-tree. High-bush Cranberry. Pimbina.

acerifolium L. Dockmackie. Arrow-wood.

dentatum L. Arrow-wood.

cassinoides L. Withe Rod. Wild Raisin.

Lentago L. Sweet Viburnum. Sheepberry. Nannyberry. Wild Raisin.

Sambucus [Tourn.] L. Elder.

canadensis L. Common Elder.

racemosa L. Red-berried Elder.

VALERIANACEAE

Valeriana [Tourn.] L. Valerian.

officinalis L. Garden Heliotrope. Slightly escaped from gardens.

Valerianella [Tourn.] Hill. Corn Salad. Lamb's Lettuce.

radiata (L.) Dufr. Herb. Spfld Sci. Museum; Springfield railroads, Miss Eaton, 1892. Doubtfully native in this vicinity.

radiata (L.) Dufr. var. *leiocarpa* (T. & G.) Krok. Springfield, C. B. Graves in *Rhodora*, Vol. IV, p. 195.

DIPSACACEAE

- Dipsacus* [Tourn.] L. Teasel.
sylvestris Huds. Wild Teasel. Cobb's List.

CUCURBITACEAE

- Sicyos* L. One-seeded Bur Cucumber.
angulatus L.
Echinocystis T. & G. Wild Balsam-apple.
lobata (Michx.) T. & G.

CAMPANULACEAE

- Specularia* (Heist.) Fabricius. Venus's Looking-glass.
perfoliata (L.) A. DC.
Campanula [Tourn.] L. Bellflower.
rotundifolia L. Harebell. Bluebell.
aparinoides Pursh. Marsh Bluebell.

LOBELIACEAE

- Lobelia* [Plumier] L.
cardinalis L. Cardinal-flower.
 SIPHILITICA L. Great Lobelia. Occasional.
spicata Lam.
Kalmii L. South Hadley, E. Hitchcock ; Greenfield, F. G. Tuckerman ; Turner's Falls, C. S. Plumb ; Amherst, W. D. Barlow.
inflata L. Indian Tobácco.
Dortmanna L. Water Lobelia.

COMPOSITAE

- Vernonia* Schreb. Ironweed.
noveboracensis Willd. West Springfield, E. Hitchcock.
Eupatorium [Tourn.] L. Thoroughwort.
purpureum L. Joe-Pye Weed. Trumpet Weed.
purpureum L. var. *maculatum* (L.) Darl. Springfield, etc., L. Andrews.
verbenaefolium Michx.
sessilifolium L. Upland Boneset. Notch, Mt. Holyoke, H. G. Jesup.
perfoliatum L. Thoroughwort. Boneset.
urticaefolium Reichard. White Snakeroot.
Mikania Willd. Climbing Hemp-weed.
scandens (L.) Willd.
Liatris Schreb.
scariosa Willd.

Solidago L. Golden-rod.

squarrosa Muhl. Mt. Holyoke, Mt. Toby ; Agawam, L. A.
Marsh ; Shutesbury, Sunderland, C. S. Plumb.

caesia L.

caesia L. var. *axillaris* (Pursh.) Gray. Cobb's List.

latifolia L.

bicolor L.

puberula Nutt. Pelham, H. G. Jesup ; South Hadley, Mrs. C. S.
Phelps ; Amherst.

uliginosa Nutt.

speciosa Nutt.

patula Muhl.

arguta Ait. Mt. Holyoke ; Leverett, H. G. Jesup.

junceae Ait.

neglecta T. & G.

odora Ait. Sweet Golden-rod.

ulmifolia Muhl.

rugosa Mill.

nemoralis Ait.

canadensis L.

altissima L.

serotina Ait.

serotina Ait. and var. *gigantea* (Ait.) Gray.

rigida L. South Hadley, E. Hitchcock ; also see Hoffmann in
Rhodora, Vol. VI, p. 206.

graminifolia (L.) Salisb.

tenuifolia Pursh. Springfield, L. Andrews.

Aster [Tourn.] L. Starwort. Aster. Frost-flower.

divaricatus L.

Schreberi Nees. Springfield, L. Andrews.

macrophyllus L.

novae-angliae L.

patens Ait.

undulatus L.

cordifolius L.

laevis L.

ericoides L.

amethystinus Nutt. Hadley, E. Tuckerman, H. G. Jesup. Lev-
erett, C. S. Plumb.

multiflorus Ait.

dumosus L.

lateriflorus (L.) Britton.

Tradescanti L.

paniculatus Lam.

- A. salicifolius** Ait.
longifolius Lam.
novi-belgii L. Springfield, L. Andrews.
puniceus L.
puniceus L. var. *demissus* Lind. Northampton, R. Cameron ;
M. L. Fernald in *Rhodora*, Vol. I, p. 190.
puniceus L. var. *compactus* Fernald. Northampton, R. Cam-
eron ; M. L. Fernald in *Rhodora*, Vol. I, p. 189.
puniceus L. var. *firmus* (Nees) T. & G. Springfield, L. An-
drews.
umbellatus Mill.
linariifolius L.
ptarmicoides T. & G. South Hadley Falls ; Herb. Mt. Holyoke
College.
acuminatus Michx.
tenuifolius L.
Erigeron L. Fleabane.
pulchellus Michx. Robin's Plantain.
philadelphicus L.
annuus (L.) Pers. Daisy Fleabane. Sweet Scabious.
ramosus (Walt.) BSP. Daisy Fleabane.
ramosus (Walt.) BSP. var. *discoideus* (Robbins) BSP.
canadensis L. Horse-weed. Butter-weed.
Sericocarpus Nees. White-topped Aster.
asteroides (L.) BSP.
linifolius (L.) BSP.
Antennaria Gaertn. Everlasting. Ladies' Tobacco.
Parlinii Fernald. Mt. Holyoke (Notch) ; Mt. Toby, A. V. Osmun.
canadensis Greene. Springfield, L. Andrews.
plantaginifolia (L.) Richards. Plantain-leaved Everlasting.
fallax Greene. Springfield, L. Andrews.
neodioica Greene. Springfield, L. Andrews.
neglecta Greene. Springfield, L. Andrews.
Anaphalis DC. Everlasting.
margaritacea (L.) Benth. & Hook. Pearly Everlasting.
Gnaphalium L. Cudweed.
polycephalum Michx. Common Everlasting.
decurrens Ives. Everlasting.
uliginosum L. Low Cudweed.
Inula L. Elecampane.
HELENIUM L. Elecampane.
Ambrosia [Tourn.] L. Ragweed.
trifida L. Great Ragweed.

- A. trifida** L. var. *integrifolia* (Muhl.) T. & G. Springfield, L. Andrews.
artemisiifolia L. Roman Wormwood. Hog-weed. Bitter-weed.
- Xanthium** [Tourn.] L. Cocklebur. Clotbur.
SPINOSUM L. Plainfield, Porter.
STRUMARIUM L. See Britton & Brown's *Ill. Flora of N. A.*, Vol. III, p. 298.
ECHINATUM Murr. Springfield, L. Andrews.
- Heliopsis** Pers. Ox-eye.
scabra Dunal. Springfield, L. Andrews.
- Rudbeckia** L. Cone-flower.
triloba L. Springfield, L. Andrews.
HIRTA L. Yellow Daisy. Black-eyed Susan. Nigger-head.
laciniata L.
- Helianthus** L. Sunflower.
annuus L. Common Sunflower. Frequently spontaneous.
scaberrimus Ell. Springfield, L. Andrews.
giganteus L.
divaricatus L.
strumosus L.
decapetalus L.
TUBEROSUS L. Jerusalem Artichoke. Northampton meadows ; Northfield meadows.
- Coreopsis** L. Tickseed.
TINCTORIA Nutt. Roadsides.
- Bidens** L. Bur Marigold.
frondosa L. Common Beggar-ticks. Stick-tight.
connata Muhl.
cernua L. Stick-tight.
laevis (L.) BSP.
Beckii Torr. Water Marigold. Agawam river, Mrs. M. L. Owen.
- Galinsoga** R. & P.
parviflora Cav. Springfield, Dr. W. H. Chapin, 1888. Since found elsewhere occasionally.
- Helenium** L. Sneezeweed.
nudiflorum Nutt. S. C. Brooks, 1910.
autumnale L. Springfield, L. Andrews.
- Achillea** (Vaill.) L. Yarrow.
Millefolium L. Common Yarrow. Milfoil.
- Anthemis** (Mich.) L. Chamomile.
COTULA L. May-weed. Dog Fennel.
ARVENSIS L. Corn Chamomile. Amherst, in grain fields.
- Chrysanthemum** [Tourn.] L. Ox-eye Daisy.
LEUCANTHEMUM L. Ox-eye or White Daisy. Marguerite.
 White-weed. One of our worst weeds in mowings.

C. segetum L. Corn Chrysanthemum. Corn Marigold. Pansy Park, Belchertown, L. W. Goodell. Escaped from cultivation.

Parthenium (L.) Bernh. Feverfew. Springfield, L. Andrews.

Balsamita L. var. *tanacetoides* Boiss. Costmary. Mint Geranium. Roadsides, rare, E. Tuckerman.

Tanacetum L. Tansy.

VULGARE L. Common Tansy.

VULGARE L. var. *CRISPUM* DC. Occasional.

Artemisia L. Wormwood.

caudata Michx. Springfield, L. Andrews.

canadensis Michx. Mt. Sugarloaf, Sunderland.

VULGARIS L. Common Mugwort.

BIENNIS Willd. Springfield, L. Andrews.

Tussilago [Tourn.] L. Coltsfoot.

FARFARA L. Amherst, Pelham, Granville, Springfield, Dr. W. H. Chapin. One of our earliest introduced plants, but still rare.

Petasites [Tourn.] Hill. Sweet Coltsfoot.

palmatus (Ait.) Gray. Sunderland, E. Hitchcock; Amherst (1911), R. E. Torrey. Probably Dr. Hitchcock's original station was Plumtrees, Sunderland, where it has existed for many years and is still found. For a number of years it did not appear here, but it has recently come in again.

Erechtites Raf. Fireweed.

hieracifolia (L.) Raf.

Senecio [Tourn.] L. Groundsel. Ragwort. Squaw-weed.

VULGARIS L. Common Groundsel.

obovatus Muhl.

aureus L. Golden Ragwort.

Balsamitae Muhl.

Arctium L. Burdock.

LAPPA L. Great Burdock.

MINUS Bernh. Common Burdock. Springfield, L. Andrews.

NEMEROSUM Lejeune & Courtois. Springfield, L. Andrews. See M. L. Fernald and K. M. Wiegand in *Rhodora*, Vol. XII, p. 45.

Cirsium [Tourn.] Hill.

lanceolatum (L.) Hill. Common or Bull Thistle.

discolor (Muhl.) Spreng.

altissimum (L.) Spreng.

muticum Michx. Swamp Thistle.

pumilum (Nutt.) Spreng. Pasture or Bull Thistle.

ARVENSE (L.) Scop. Canada Thistle.

Onopordum (Vaill.) L. Cotton or Scotch Thistle.

ACANTHIUM L. Amherst, H. L. Clark in *Rhodora*, Vol. I, p. 164.

Centaurea L. Star Thistle.

Cyanus L. Bachelor's Button.

NIGRA L. Knapweed. Spanish Buttons. Waste places, Hardwick, E. Hitchcock; Amherst, etc.

Cichorium [Tourn.] L. Succory or Chicory.

INTYBUS L. Common Chicory. Blue Sailors. Formerly rare (1875), now quite common.

Krigia Schreb. Dwarf Dandelion.

virginica (L.) Willd.

amplexicaulis Nutt. Cynthia.

Leontodon L. Hawkbit.

AUTUMNALIS L. Fall Dandelion. "Arnica." One station noted in 1875; now rather common in some localities.

Picris L.

hieracoides L. Springfield, waste places, Mrs. M. L. Owen.

echinoides L. Ox-tongue. Forest Park, Springfield, several plants noted in 1894, Mrs. M. L. Owen.

Tragopogon [Tourn.] L. Goat's Beard.

porrifolius L. Salsify. Oyster-plant. Huntington, escaped from cultivation.

pratensis L. Huntington, Northampton, escaped from cultivation.

Taraxacum [Haller] Ludwig. Dandelion.

OFFICINALE Weber. Troublesome on lawns. For many years what is known as the French dandelion has been cultivated on the Mass. Agr. College grounds, and has escaped very freely into nearby fields. It presents very different characteristics from the type even when escaped, and is susceptible to a mildew (*Podosphaera*), differing in this respect from the type.

officinale Weber. var. *palustre* (Sm.) Blytt. Springfield, L. Andrews.

ERYTHROSPERMUM Andr. Red-seeded Dandelion. Mass. Agr. College grounds.

Sonchus [Tourn.] L. Sow Thistle.

ARVENSIS L. Field Sow Thistle.

OLERACEUS L. Common Sow Thistle.

ASPER (L.) Hill. Spring-leaved Sow Thistle.

Lactuca [Tourn.] L. Lettuce.

SCARIOLA L. Prickly Lettuce. Springfield, L. Andrews.

SCARIOLA L. var. *INTEGRATA* Gren. & Godr. Springfield, L. Andrews.

- L. canadensis* L. Wild Lettuce. Horse-weed. Springfield, L. Andrews.
integrifolia Bigel.
hirsuta Muhl. Amherst, H. G. Jesup.
spicata (Lam.) Hitchc.
- Crepis* L. Hawk's Beard.
capillaris (L.) Wallr. Springfield, L. Andrews.
- Prenanthes* (Vaill.) L. Rattlesnake-root.
alba L. White Lettuce. Rattlesnake-root.
trifoliata (Cass.) Fernald. Gall-of-the-earth.
altissima L.
- Hieracium* [Tourn.] L. Hawkweed.
 AURANTIACUM L. Orange Hawkweed. Devil's Paint-brush.
 Formerly cultivated in gardens, and for the past 15 years a noxious weed in hay fields and on higher elevations, especially in Worcester and Berkshire counties.
- venosum* L. Rattlesnake-weed. Poor Robin's Plantain.
paniculatum L.
marianum Willd. Dry Hill, Montague, R. E. Torrey.
scabrum Michx.
Gronovii L.
- MURORUM L. Golden Lungwort. Established in open woods. Northampton, Mrs. E. H. Terry; *Rhodora*, Vol. VII, p. 80.
canadense Michx.



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Elm	24	Bald Rush	12	Sugar Maple	41	Calamagrostis	9
Fly Honey-		Balm	53	Walnut	22	Calingale	11
suckle	58	Balm of Gilead	22	Willow	21	Calla	16
Germander	52	Balmoney	55	Blackberry Lily	19	Callitriche	40
Mountain Ash	34	Balsam	42	Bladder Cam-		Calluna	49
Pennyroyal	53	Fir	5	pion	28	Calopogon	20
Wh. Hellebore	17	Poplar	22	Fern	2	Caltha	30
Yew	5	Nut	41	Nut	41	Camelina	31
Ammania	44	Bladderwort	56	Blephilia	53	Campanula	59
Amorpha	38	Blephilia	53	Blood Root	31	Campion	28
Ampelopsis	42	Barbarea	32	Blueberry	49	Camptosorus	1
Amphicarpa	39	Barberry	30	Blue Cohosh	30	Canada Blue	
Anaphalis	61	Barnyard Grass	8	Curls	52	Grass	10
Andromeda	48	Barren Strawb'y	35	Tangle	49	Thistle	63
Andropogon	7	Bartonia	50	Vervain	52	Violet	44
Anemone	29	Basil	53	Blue-eyed Grass	19	Canadi'n Burnet	36
Anemonella	29	Basswood	42	Blue-joint Grass	9	Canary Grass	8
Anethum	36	Bastard Penny-		Blue-weed	52	Cannabis	24
Angelica	47	royal	52	Bluets	57	Capsella	31
Antennaria	61	Toad-flax	24	Boehmeria	48	Caraway	46
Anthemis	62	Bayberry	22	Bog Rosemary	24	Cardamine	32
Anthroxanthum	8	Beak Rush	13	Rush	17	Cardinal-flower	59
Anychia	27	Beaked Hazeln't	23	Botrychium	2	Carex	13, 14, 15
Apios	39	Bearberry	49	Bottle-brush	2	Carpet Weed	27
Aplectrum	21	Beard Grass	7	Grass	11	Carpinus	23
Apocynum	50	Bear Oak	23	Bottle Grass	8	Carrion Flower	18
Apple	34	Bedstraw	57	Bouncing Bet	28	Carrot	47
Apple of Peru	54	Beech	23	Box Elder	41	Carum	46
		Fern	1	Brachyelytrum	9	Carya	22

Cassia	37	Comfrey	52	Datura	54	Erysimum	32
Castalia	29	Commelina	16	Daucus	47	Erythronium	18
Castanea	23	Cone-flower	62	Day Lily	17	Eupatorium	59
Castilleja	56	Conium	46	Decodon	44	Euphorbia	40
Catchfly	28	Conopholis	56	Deerberry	49	European Millet	7
Cat Mint	53	Conringia	32	Deer Grass	44	Mountain Ash	34
Catnip	53	Convallaria	18	Dentaria	32	Even'g Primrose	45
Cat-tail	6	Convulvulus	51	Deptford Pink	28	Everlasting	61
Cat-tail Flag	6	Coptis	30	Deschampsia	10	Pea	39
Caulophyllum	30	Coral Root	21	Desmodium	38		
Ceanothus	42	Corallorrhiza	21	Dianthus	28		
Celandine	31	Coreopsis	62	Dicentra	31		
Celastrus	41	Corn Chamomile	62	Dicksonia	2		
Celtis	24	Chrysanthem	63	Diervilla	58		
Cenchrus	8	Cockle	28	Digitaria	7		
Centaurea	64	Gromwell	52	Dipsacus	59		
Cephalanthus	57	Salad	58	Dirca	44		
Cerastium	27	Speedwell	55	Ditch Stonecrop	33		
Ceratophyllum	28	Spurrey	27	Dock	25		
Chaff-seed	56	Cornel	47	Dockmackie	58		
Chain Fern	1	Cornus	48	Dogbane	50		
Chamaecyparis	5	Coronilla	33	Dog's Tooth	18		
Chamaedaphne	49	Costmary	61	Violet	18		
Chamomile	62	Corydalis	33	Dogwood	40		
Cheat Grass	11	Corylus	23	Downy False	55		
Chelidonium	31	Cotton Grass	13	Foxglove	23		
Chelone	55	Thistle	64	Green Alder	23		
Chenopodium	26	Cottonwood	22	Yellow Violet	44		
Chestnut	23	Cow Lily	28	Drop-seed	9		
Oak	23	Parsnip	46	Drosera	33		
Chickweed	27	Wheat	56	Duckweed	16		
Chicory	64	Crab Grass	7	Dulichium	12		
Chimaphila	47	Cracca	39	Dutchman's	31		
Chinquapin Oak	23	Crack Willow	21	Breches	31		
Chioenes	49	Cranberry-tree	58	Dwarf Cornel	47		
Chokeberry	34	Crane Fly Orchis	21	Dandelion	64		
Choke Cherry	37	Cranesbill	39	Ginseng	46		
Christmas Fern	1	Crataegus	35	Gray Willow	22		
Chrysanthemum	62	Creeping Snow-	49	Mistletoe	24		
Chrysosplenium	33	berry	29	Raspberry	36		
Cichorium	64	Spearwort	54	Sumac	40		
Cicuta	46	Thyme	65				
Cimicifuga	39	Crepis	37				
Cinna	9	Crimson Clover	37				
Cinnamon Fern	2	Crotaria	37				
Rose	37	Crowfoot	29				
Cinquefoil	35	Cryptogramma	1				
Circaea	45	Cryptotaenia	46				
Cirsium	63	Cuckoo Flower	32				
Cladium	13	Culver's-root	55				
Clammy Azalea	38	Currant	34				
Locust	28	Cursed Crowfoot	29				
Claytonia	57	Cuscuta	51				
Cleavers	30	Cut-grass	8				
Clematis	47	Cynodon	10				
Clethra	1	Cynoglossum	52				
Cliff Brake	25	Cynthia	64				
Climbing False	2	Cyperus	11				
Buckwheat	31	Cypress	5				
Fern	59	Spurge	40				
Fumitory	18	Cypripedium	19				
Hemp-weed	50	Cystopteris	2				
Clintonia	37						
Closed Gentian	3						
Clover	62						
Club Moss	18						
Cocklebur	54						
Colic Root	63						
Collinsonia	30						
Coltsfoot	60						
Columbine	64						
Comandra	10						
	11						

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Fagopyrum	26
Fagus	23
Fall Dandelion	64
False Flax	31
Gromwell	52
Hellebore	17
Indigo	37
Loosestrife	45
Miterwort	33
Nettle	24
Pimpernel	55
Solomon's Seal	18
Spikenard	18
Fescue Grass	11
Festuca	11
Fever Bush	31
Feverfew	63
Feverwort	58
Field Mouse-ear	27
Chickweed	64
Sow Thistle	55
Figwort	12
Fimbristylis	7
Finger Grass	5
Fir	63
Fireweed	39
Flax	61
Elebane	19
Fleur-de-lis	9
Floating Foxtail	50
Heart	48
Flw'r'g Dogwood	2
Fern	42
Flow'r-of-an-hour	27
F'rkd Chickweed	11
Fowl Mead.Grass	9
Foxtail Grass	35
Fragaria	50
Fraxinus	50
Fringed Gentian	10
Orchis	40
Polygala	42
Frost Grape	13
Frostweed	43
Fuirena	31
Fumaria	42
Fumitory	

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Galinsoga	62
Galium	57
Galeopsis	53
Gall-of-the-earth	65
Gard. Asparagus	18
Heliotrope	58
Orpine	33
Rose	37
Sorrel	25

Gaultheria	49	Heal-all	53	Indian Pipe	47	Leontodon	64
Gaylussacia	49	Heather	49	Rice	8	Leonurus	53
Gentian	50	Hedeoma	53	Tobacco	59	Lepidium	31
Gentiana	50	Hedge Bindweed	51	Turnip	16	Lespedeza	38
Geranium	39	Hyssop	55	Interrupted Fern	2	Lettuce	64
Gerardia	55	Mustard	32	lnula	61	Leverwood	23
Germander	52	Nettle	53	Ipomoea	51	Liatris	59
German Millet	8	Helenium	62	Iris	19	Ligustrum	50
Geum	36	Helianthemum	43	Ironweed	59	Lilium	17
Giant Hyssop	53	Helianthus	62	Ironwood	23	Lily	17
Ginseng	46	Heliopsis	62	Isates	32	Lily of the Valley	18
Glaucous Willow	22	Hemerocallis	17	Isoetes	4	Linaria	55
Gleditsia	37	Hemicarpha	13			Linden	55
Glyceria	11	Hemlock	5			Linnaea	58
Goat's Beard	64	Hemp	24	J		Linum	39
Rue	37	Henbane	53	Jack-in-the-Pulpit	2	Liparis	21
Golden Alexan's	46	Henbit	54			Liriodendron	30
Club	16	Hepatica	29			Listera	21
Lungwort	65	Heracleum	46	Jamestown Weed	54	Lithospermum	52
Bagwort	63	Herb Robert	39	Jerusalem Arti-		Liverleaf	29
Saxifrage	33	Heteranthera	17	choke	62	Lobelia	59
Golden-rod	60	Hibiscus	42	Oak	26	Locust	38
Goldthread	30	Hickory	22	Joe-pye Weed	59	Lolium	11
Goose Grass	10	Hieraceum	65	Juglans	22	Long-spurred Vio-	
Grape	12	Hierochloa	8	Juncus	17	let	44
Hyacinth	48	High Blueberry	49	June Grass	10	Lonicera	58
Grass of Parnassus	33	Mallow	42	Juniper	5	Loosestrife	49
Gratiola	55	Hoary Pea	38	Juniperus	5	Lopseed	56
Great Bulrush	12	Plantain	57			Lotus	38
Burdock	63	Hobble-bush	58	K		Lousewort	56
Bladderwort	56	Hog Peanut	39			Low Birch	23
Lobelia	59	Holcus	9	Kalmia	48	Blk Blueberry	49
Ragweed	61	Holy Grass	8	Knapweed	64	Cudweed	61
St. John's-wort	43	Honewort	46	Knawel	27	Hop Clover	37
Solomon's Seal	17	Honey Locust	37	Knotweed	25	Spear Grass	10
Water Dock	25	Honeysuckle	58	Kochia	26	Sweet Blueberry	49
Willow-herb	45	Hook'd Crowfoot	29	Krigia	64	Ludvigia	45
Green Amaranth	26	Hop	24			Lupine	37
Ash	50	Hornbeam	23	L		Lupinus	37
Brier	18	Tree	39			Luzula	17
Dragon	16	Horehound	53	Labrador Tea	48	Lychnis	28
Gromwell	52	Hornwort	28	Lactuca	64	Lycium	54
Ground Cherry	54	Horse Balm	51	Ladies' Tresses	20	Lycopodium	3
Hemlock	5	Mint	53	Lady's Slipper	19	Lycopsis	52
Ivy	53	Nettle	54	Sorrel	39	Lycopus	54
Laurel	49	Horse-chestnut	41	Thumb	25	Lygodium	2
Pine	3	Horse-radish	32	Lamb's quarters	26	Lyonia	49
Groundnut	39	Horsetail	3	Lamium	53	Lyme Grass	11
Groundsel	63	Horse-weed	61	Lance-leaved Violet	43	Lysimachia	49
Gypsophila	28	Hound's Tongue	52			Lythrum	44
		Houseleek	33				
		Houstonia	57				
H		Huckleberry	49				
		Humulus	24			M	
Habenaria	19	Hydrocotyle	46			Mad-dog Skullcap	
Hackberry	24	Hydrophyllum	51			Magnolia	53
Hair Grass	9	Hyoscyamus	54			Maianthemum	18
Halberd-leaved		Hypericum	43			Maidenhair Fern	1
Tear-thumb	25	Hypoxis	18			Male Berry	49
Halenia	50	Hystrix	11			Mallow	42
Hamamelis	34					Malva	42
Hardhack	34	I				Manna Grass	11
Harebell	59	Ilex	41			Maple	41
Hare's-ear Mustard	32	Ilysanthes	55			Maple-leaved	
		Impatiens	42			Goosefoot	26
Hare's Tail	13	Indian Chickw'd	27			Marrubium	53
Hawkbit	64	Cucumber Root	18			Marsh Bluebell	59
Hawkweed	65	Grass	7			Cinquefoil	35
Hawthorne	35	Hemp	51			Cress	32
Hay-scented Fern	2	Mallow	42			Grass	10
Hazelnut	23						

Marsh Marigold	30	Myriophyllum	45	Pale Corydalis	31	Polygonum	25
Speedwell	55			Dock	31	Polypodium	1
St. John's-wort	43			Laurel		Polypody	1
Mat Grass	11	N		Touch-me-not	42	Polystichum	1
Matrimony Vine	54			Panax	46	Pondweed	6
May Apple	30	Naiad	6	Panic Grass	7	Pontoderia	17
Mayflower	49	Najas	6	Panicum	7	Poplar	22
May-weed	62	Nardus	11	Pansy	44	Populus	22
Meadow Fescue	11	Neckweed	55	Paper Birch	23	Portulaca	28
Foxtail	9	Nemopanthus	41	Pappoose Root	30	Potamogeton	6
Grass	10	Nepeta	53	Parietaria	24	Potentilla	35
Parsnip	46	Nettle	24	Parnassia	33	Poverty Grass	8
Rue	29	New Jersey Tea	42	Parsnip	46	Prairie Willow	22
Meadow-sweet	34	Nicandra	54	Partridge Berry	57	Prenanthes	65
Medeola	18	Night Flowering	54	Paspalum	7	Prickly Ash	39
Medic	31	Campion	28	Pastinaca	46	Gooseberry	34
Medicago	38	Nightshade	54	Pasture Thistle	63	Lettuce	64
Medick	36	Northern Bed-		Patience Dock	25	Primrose-leaved	
Melampyrum	56	straw	57	Pearlwort	27	Violet	43
Melilotus	ii, 38	Fox Grape	47	Pearly Everlas'g	61	Prince s Feather	25
Melissa	53	Norway Spruce	5	Pedicularis	56	Pine	47
Menispermum	30	Nut Rush	13	Pellaea	1	Privet	50
Mentha	54	Nymphaea	28	Pellitory	24	Proserpinaca	45
Menyanthes	50	Nymphoides	50	Peltandra	16	Prunus	37
Mermaid-weed	45	Nyssa	47	Penthorum	33	Prunella	53
Mexican Tea	26			Pentstemon	55	Psedera	42
Microstylis	21			Peppergrass	31	Psilocarya	12
Mikania	59			Peppermint	54	Ptelea	39
Mild Water		O		Petasites	63	Pteris	1
Pepper	25			Phalaris	8	Pterospora	48
Milk Purslane	40	Oak	23	Phegopteris	1	Purple Amaranth	26
Milkweed	51	Oakesia	17	Phleum	9	Azalea	48
Milkwort	40	Oat	10	Phlox	51	Flower'g Rasp.	36
Mimulus	55	Grass	10	Phragmites	10	Fringed Orchis	20
Mint	54	Oenothera	45	Phryma	56	Gerardia	56
Mitchella	57	Old-witch Grass	7	Physalis	54	Milkweed	51
Mitella	33	One-flowered	56	Phytolacca	26	Thorn Apple	54
Miterwort	33	Cancer-root	47	Picea	5	Willow	22
Mocker Nut	22	Pyrola	47	Pickarel Weed	17	Purslane	28
Mock Pennyroy'1	53	One-seeded Bur		Picris	64	Putty Root	21
Mollugo	27	Cucumber	59	Pigeon Grape	42	Pycnanthemum	54
Monarda	53	Onion	17	Grass	8	Pyrola	47
Moneses	47	Onoclea	2	Pig Nut	22	Pyrus	34
Moneywort	49	Onopordum	64	Pigweed	26		
Monkey Flower	55	Onosmodium	52	Pilea	24		
Monotropa	47	Ophioglossum	2	Pin Oak	23	Q	
Moonseed	30	Orange Grass	43	Pine	5		
Moonwort	2	Hawkweed	65	Drops	48	Quaking Grass	10
Morning Glory	51	Orchard Grass	10	Pinesap	47	Quercus	23
Morus	24	Orchis	19	Pink	28	Quillwort	4
Mossy Stonecrop	33	Origanum	54	Pinus	5		
Motherwort	53	Ornithogalum	18	Pinweed	43	R	
Moth Mullein	55	Orobanche	56	Pipewort	16		
Mountain Fly		Orontium	56	Pipsissewa	47		
Honeysuckle	58	Oryzopsis	8	Pitch Pine	5	Rabbit-foot	37
Holly	41	Osmorhiza	46	Plantago	57	Radicula	32
Laurel	48	Osmunda	2	Plantain	57	Radish	32
Maple	47	Ostrich Fern	2	Plantain-leaved		Ragged Fringed	
Mint	54	Ostrya	23	Everlasting	61	Orchis	20
Rice	58	Oswego Tea	53	Platanus	34	Robin	28
Mouse-ear Chick-		Oxalis	39	Plum	37	Ragweed	61
weed	27	Ox-eye	62	Poa	10	Ram's Head	
Moxie Plum	49	Daisy	62	Podophyllum	30	Lady's Slip'r	19
Mud Plantain	17	Ox-tongue	64	Podostemum	33	Ramsted	55
Mugwort	63	Oxybaphus	27	Pogonia	20	Ranunculus	ii, 29
Mulberry	24			Poison Hemlock	46	Raphanus	32
Mullein	55			Ivy	40	Rattle-box	37
Muscari	18			Poke Milkweed	51	Rattlesnake Fern	3
Musk Mallow	42	P		Pokeweed	26	Grass	11
Mustard	32			Polygala	40	Plantain	20
Myosotis	52	Painted Cup	56	Polygonatum	18	Rattlesnake-root	65
Myrica	22	Trillium	18	Polygonella	26	Rattlesn'e-weed	65

Red Ash	50	Sand Bar Willow	21	Small Solomon's		Stickseed	52
Baneberry	30	Cherry	37	Seal	18	Stiff Water Crow-	
Campion	28	Spurrey	27	Smaller Bladder-		foot	29
Cedar	5	Sandbur	8	wort	56	St. John's-wort	43
Clover	37	Sandwort	27	Yellow Lady's		Stoncrop	33
Currant	37	Sanguinaria	31	Slipper	19	Stramonium	54
Maple	41	Sanguisorba	36	Small-flowered		Strawberry	35
Mulberry	24	Sanicle	46	Crowfoot	29	Blite	26
Oak	23	Sanicula	46	Smartweed	25	Tomato	54
Pine	5	Saponaria	28	Smilacina	18	Streptopus	18
Spruce	5	Sarracenia	33	Smilax	18	Striped Maple	41
Top	9	Sassafras	31	Smooth Alder	23	Struthiopteris	2
Red-ber'd Elder	58	Satureja	53	False Foxg'l'e	55	Sugarberry	24
Red-ozier Dog-		Savory	53	Gooseberry	34	Sugar Maple	41
wood	47	Saxifraga	33	Sumac	40	Sumac	40
Red-root	42	Saxifrage	33	Winterberry	41	Sundew	33
Red-seeded Dan-		Scarlet Oak	23	Snowberry	58	Sundrops	45
delion	64	Painted Cup	56	Solanum	54	Sunflower	62
Reed	10	Scheuchzeria	7	Solidago	60	Swamp But'rcup	29
Bent Grass	9	Schwalbea	55	Solomon's Seal	18	Dock	25
Canary Grass	8	Scirpus	12	Sonchus	64	Loosestrife	44
Meadow Grass	11	Scleranthus	27	Sorbaria	34	Milkweed	51
Rhamnus	42	Scleria	13	Sow Thistle	64	Saxifrage	33
Rhexia	44	Scorpion-grass	52	Sparganium	6	Thistle	63
Rhododendron	48	Scotch Pine	5	Spartina	10	White Oak	23
Rhus	40	Scouring Rush	3	Spearmint	54	Sweet Birch	23
Ribbon Grass	8	Scrophularia	55	Speckled Alder	23	Sweetbrier	37
Ribes	34	Scutellaria	53	Specularia	59	Cicely	46
Rib Grass	57	Sedge	13	Speedwell	55	Clover	38
Rice Cut-grass	8	Sedum	33	Sphenopholis	9	Coltsfoot	63
Richweed	24	Seedbox	45	Spergula	27	Fern	22
River-b'nk Grape	42	Selaginella	3	Spergularia	27	Flag	16
River Bulrush	12	Self-heal	53	Spice Bush	31	Gale	22
Weed	33	Sempervivum	33	Spiderwort	16	Golden-rod	60
Robinia	38	Senecio	63	Spiked Loose-		Pepperbush	47
Robin's Plantain	61	Senna	37	strife	44	Vernal Grass	8
Rock Brake	1	Sensitive Fern	2	Spikenard	45	Viurnum	58
Cress	32	Sericocarpus	61	Spike Rush	12	William Catchfly	
Rockrose	43	Setaria	8	Spiraea	34	Woodruff	57
Roman Worm-		Shad Bush	34	Spiranthes	20	Switch Grass	7
wood	62	Shagbark Hick'y	22	Spirodela	16	Sycamore	34
Rosa	37	Sheep Laurel	48	Spleenwort	1	Symphoricarpos	58
Rose	37	Sorrel	25	Sporobolus	9	Symphytum	52
Mallow	42	Sheep's Fescue	11	Spotted Cowbane	46	Symplocarpus	16
Rough Bedstr'w	57	Sheph'rd's Purse	31	Touch-me-not	42		
Rough-stalked		Shield Fern	1	Wintergreen	47		
Mead'w Gr's	10	Shin Leaf	47	Spreading Dog-			
Round-leaved		Shining Willow	21	bane	50		
Cornel	47	Showy Lady's		Spring Beauty	28		
Sundew	33	Slipper	19	Cress	32		
Violet	44	Orchis	19	Vetch	38		
Rubus	36	Shrubby Cinque-		Spring-leaved			
Rudbeckia	62	foil	35	Sow Thistle	64		
Rue Anemone	29	Sickle-pod	32	Spruce	5		
Rumex	25	Sicyos	59	Spurge	40		
Rush	17	Silene	28	Spurred Gentian	50		
Grass	9	Silky Cornel	47	Squaw-root	56		
Russian Thistle	26	Willow	22	Squirrel Corn	31		
Rutabaga	32	Silver Maple	41	Stachys	53		
Rye Grass	11	Silvery Cinquef'l	35	Staff Tree	41		
Rynchospora	13	Sisymbrium ii	32	Staghorn Sumac	40		
		Sisyrinchium	19	Staphylea	41		
		Stium	46	Star Flower	50		
		Skullcap	53	Grass	18		
		Skunk Cabbage	16	Thistle	64		
		Currant	34	Star of Beth'le'm	18		
		Sleepy Catchfly	28	Starry Campion	28		
		Slender Gerardia	56	Steironema	49		
		Slippery Elm	24	Stellaria	27		
		Slough Grass	10	Stemless Lady's			
		Small Cranberry	49	Slipper	19		
		Bugloss	52	Stenophyllus	12		

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Taenidia	46
Tall Buttercup	29
Gypsophyll	28
Meadow Rue	29
Oat Grass	10
Red Top	10
Tanacetum	63
Tansy	63
Tartarian Honey-	
suckle	58
Taraxacum	64
Taxis	5
Teaberry	49
Teasel	59
Tephrosia	38
Teucrium	52
Thalictrum	29
Thaspium	46
Thimbleberry	36
Thin Grass	9
Thistle	63
Thorny Amaranth	26

Thoroughwort	59	Utricularia	56	Water Purslane	45	Wild Senna	3
Three-seeded Mer-		Uvularia	17	Shield	29	Sensitive Plant	37
cury	40			Smartweed	25	Teasel	59
Three-toothed Cin-				Speedwell	55	Yellow Lily	17
quefoil	35	V		Starwort	40	Willow	21
Thyme-leaved				Willow	44	Willow-herb	45
Sandwort	27	Vaccinium	49	Water-weed	7	Winter Cress	32
Speedwell	55	Valerian	58	Waxwork	41	Wintergreen	47
Thymus	54	Valeriana	58	Weeping Willow	21	Witch Grass	11
Tiarella	33	Valerianella	58	White Alder	47	Hazel	34
Tickseed	62	Vallisneria	7	Ash	50	Wood Anemone	29
Tick Trefoil	38	Vanilla Grass	8	Baneberry	30	Mint	53
Tilia	42	Velvet Leaf	42	Bent Grass	9	Nettle	24
Timothy	9	Grass	9	Birch	23	Reed Grass	9
Tinker's Weed	58	Venus's Looking-		Campion	28	Rush	17
Tipularia	21	glass	59	Cedar	4	Sorrel	2
Toothache tree	39	Veratrum	17	Clover	37	Woodsia	39
Toothwort	32	Verbascum	55	Fringed Orchis	20	Woodwardia	1
Tradescantia	16	Verbena	52	Grass	8	Wool Grass	12
Tragopogon	64	Vernonia	59	Lettuce	65	Worm-seed	
Treacle Mustard	32	Veronica	55	Melilot	65	Mustard	32
Tree of Heaven	40	Vervain	52	Mulberry	24	Wormwood	63
Trichostema	52	Vetch	38	Mustard	32		
Tridens	10	Vetchling	39	Oak	23		
Trientalis	50	Viburnum	58	Pine	5	X	
Trifolium	37	Vicia	38	Poplar	22	Xanthium	62
Trillium	18	Viola	43	Snakeroot	59	Xyris	16
Triosteum	58	Violet	43	Vervain	52		
Triple-awn Grass	8	Wood Sorrel	39	Water Crowfoot			
Trisetum	9	Viper's Buglose	52	Willow	29		
True Forget-me-		Virginia Creeper	42	White-topped	21	Y	
not	52	Snakeroot	24	Aster	61	Yarrow	62
Water Cress	32	Virgin's Bower	30	Wild Balsam-apple	59	Yellow Adder's	
Trumpet Honey-		Vitis	42	Bergamot	53	Tongue	—
suckle	58			Black Cherry	37	Bedstraw	57
Tsuga	5	W		Black Currant	34	Birch	23
Tufted Loosestrife		Wake Robin	18	Chess Grass	11	Clover	37
		Waldsteinia	35	Columbine	30	Cress	32
Tulip Tree	49	Walking Leaf	1	Cranesbill	39	Daisy	62
Tumble Weed	26	Wall Rue	1	Garlic	17	Dock	25
Tupelo	47	Walnut	22	Ginger	24	Fringed Orchis	20
Turk's-cap Lily	17	Water Arum	16	Indigo	37	Melilotus	38
Turtlehead	55	Avens	36	Leek	17	Pond Lily	28
Tussilago	63	Beech	23	Lettuce	65	Water Crowfoot	
Twayblade	21	Cress	32	Liquorice	57	Yellow-barked Oak	29
Twig Rush	13	Hemlock	46	Oat Grass	10	Yellow-eyed Grass	16
Twin-flower	58	Horehound	54	Orange-red Lily	17	Yew	5
Twisted Stalk	18	Waterleaf	51	Pansy	44		
Typha	6	Water Lily	29	Peppergrass	31	Z	
		Lobelia	59	Pink	28	Zanthoxylum	39
U		Marigold	62	Plum	37	Zizania	8
Ulmus	24	Milfoil	45	Radish	32	Zizia	46
Umbrella Grass	13	Parsnip	46	Red Cherry	37		
Tree	30	Pennypwort	46	Red Raspberry	36		
Upland Boneset	59	Plantain	7, 29	Sarsaparilla	45		
Urtica	24						



